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GOVERNMENT OF INDIA

RAILWAY DEPARTMENT

(RAILWAY BOARD)

Report by the Railway Board

ON

INDIAN RAILWAYS

FOR

1945-46

Volume I

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Main Statistics compared for eight years.

I.—*All Indian railways (Classes I, II and III).*

Items.		1938-39. (Pre-war).	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	**1945-46.**
Gross earnings	Rs.	107·15	111·50	126·36	144·69	167·89	199·32	*232·90	**243·59**
Total Working expenses.	(crores) Rs.	71·18	72·20	73·19	80·33	86·52	114·11	*148·81	**169·35**
Operating ratio	per cent.	66·44	64·75	57·92	55·51	51·53	57·25	*63·89	**69·52**
Number of passengers originating.	(millions)	530·62	529·67	575·72	623·16	622·26	789·87	926·70	**1,044·34**
Passenger miles	(millions)	18,742·79	18,522·05	19,928·62	22,020·11	24,352·76	32,506·07	*37,628·71	**41,335·77**
Earnings from carriage of passengers.	(crores) Rs.	30·73	30·47	34·14	39·69	48·80	67·17	*76·53	**86·74**
Average earnings per passenger mile.	Pies	3·15	3·16	3·29	3·46	3·85	3·97	*3·91	**4·03**
Freight tons originating.	(millions)	88·36	92·18	92·78	97·00	95·26	96·68	*102·13	**100·63**
Freight ton miles	(millions)	22,158·84	23,492·46	25,288·50	28,043·12	28,106·50	28,379·06	*28,441·19	**29,166·45**
Earnings from carriage of goods.	(crores) Rs.	68·57	72·56	81·48	89·63	97·21	103·23	*114·68	**116 32**
Average earnings per freight ton mile.	Pies	5·98	5·93	6·19	6·14	6·64	6·98	*7·73	**7·65**
Total train miles	(millions)	197·04	198·84	200·90	205·45	176·82	172·58	179·89	**190·15**
Gross earnings per train mile.	Rs.	5·40	5·64	6·33	7·10	9·61	11·71	*13·11	**12·96**
Working expenses per train mile.	Rs.	3·58	3·65	3·66	3·93	4·94	6·69	8·37	**9·00**
Net earnings per train mile.	Rs.	1·82	1·99	2·67	3·17	4·67	5·02	*4·74	**3·96**
Net earnings per mean mile worked.	Rs.	8,619	9,427	12,746	15,578	19,815	20,804	*20,528	**18,125**

*Revised figures.

II.—*Indian Government Railways.*

(The figures include statistics of worked lines of Indian Government railways but exclude Indian Government portions worked by the Jodhpur and His Exalted Highness the Nizam's State Railways.)

Items.		1938-39. (Pre-war).	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45	**1945-46.**
Gross earnings	(crores) Rs.	99·07	103·02	117·23	134·68	155·74	184·69	216·56	**226·58**
Total Working expenses.	(crores) Rs.	66·38	67·22	68·13	75·12	80·57	107·08	141·10	**160·53**
Operating ratio	Per cent.	67·00	65·25	58·12	55·78	51·73	57·98	65·16	**70·85**
Number of passengers originating.	(millions)	477·97	477·13	519·65	563·70	556·89	706·11	829·41	**937·20**
Passenger miles	(millions)	17,203·85	16,989·60	18,282·06	20,219·60	22,256·10	29,698·15	34,493·91	**37,842·72**
Earnings from carriage of passengers.	(crores) Rs.	27·89	27·65	30·99	36·21	44·51	61·26	69·83	**79·21**
Average earnings per passenger mile.	Pies	3·11	3·12	3·25	3·44	3·84	3·96	3·87	**4·02**
Freight tons originating.	(millions)	80·56	84·15	85·26	88·64	86·01	87·21	92·23	**92·04**
Freight ton miles	(millions)	21,160·56	22,397·66	24,201·63	26,821·49	26,785·35	27,125·60	27,068·32	**27,812·27**
Earnings from carriage of goods.	(crores) Rs.	63·95	67·55	76·26	6·01	90.64	96·07	106·78	**108·68**
Average earnings per freight ton mile.	Pies	5·80	5·79	6·05	6·01	6·50	6·80	7·57	**7·14**
Total train miles	(millions)	179·05	180·44	182·56	187·11	160·04	156·58	163·51	**172·96**
Gross earnings per train mile.	Rs.	5·51	5·71	6·42	7·20	9·73	11·79	13·24	**13·10**
Working expenses per train mile.	Rs.	3·69	3·73	3·73	4·02	5·03	6·84	8·63	**9·28**
Net earnings per train mile.	Rs.	1·82	1·98	2·69	3·18	4·70	4·96	4·61	**3·82**
Net earnings per mean mile worked.	Rs.	9,613	10,577	14,524	17,741	22,624	23,443	22,778	**19,872**

INTRODUCTORY NOTE

1. The Railway Board's annual report on Indian Railways is prepared for the financial year, *i.e.*, from 1st April of one year to the 31st March of the year following.

Volume I is a narrative report dealing with the various aspects of railway working such as general administration, financial results, improvements in, and additions to, rolling stock, commercial and operating methods, recruiting training and welfare of staff and facilities provided for the convenience of the travelling public.

Volume II contains financial and statistical summaries and statements covering the main heads of capital and revenue accounts and the complete range of railway working.

2. For the information of those who are not conversant with the value of Indian currency and the units thereof, the following details are given :—

(*a*) One *lakh* equals one hundred thousand.

(*b*) One *crore* equals one hundred lakhs.

(*c*) One *anna* equals 1/16th of a rupee.

(*d*) One *pie* equals 1/12th of an anna.

The approximate value in English coinage of a rupee at the present rate of exchange is one shilling and six pence.

3. For statistical purposes, Indian railway systems are classified as follows :—

Class I.—Railways with gross earnings of not less than Rs. 50 lakhs a year.

Class II.—Railways with gross earnings of less than Rs. 50 lakhs a year, but exceeding Rs. 10 lakhs.

Class III.—Railways with gross earnings of not more than Rs. 10 lakhs a year.

A detailed list of the railways in each class will be found in Statement 5 (pages 43 to 47) of Volume II of this Report.

4. Dibru-Sadiya Railway was purchased and amalgamated with the Bengal Assam Railway on the 1st April 1945.

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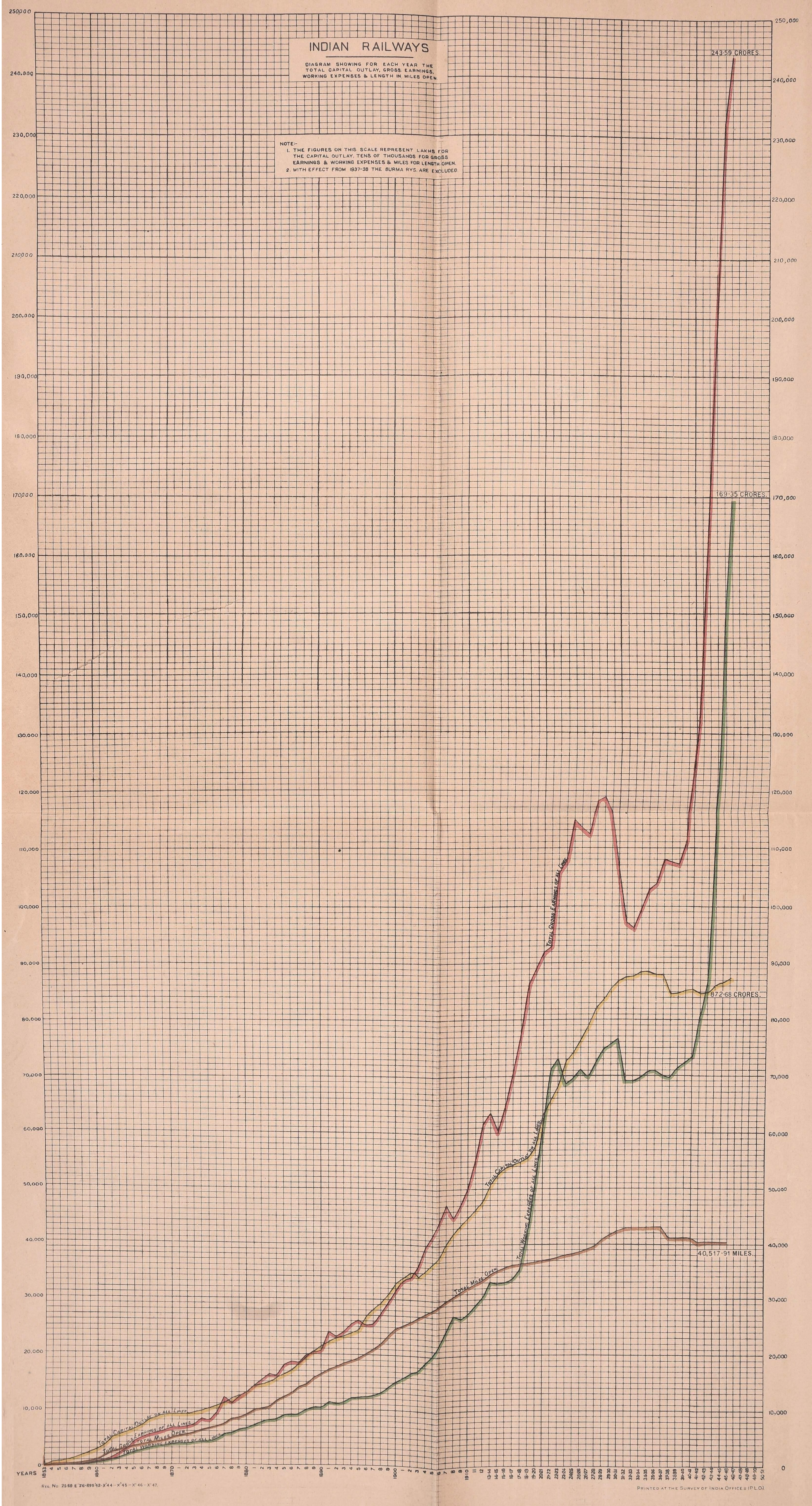

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CHAPTER I

GENERAL REVIEW

1. Monsoon conditions and agricultural results.—The monsoon of 1945, though comparatively weak at the outset, strengthened appreciably in July and practically made up the deficiency in rainfall of the previous month. A break, however, occurred in early August and the rainfall during the month was generally deficient. This was followed by copious rainfall in September, which being particularly heavy in Gujarat and the adjoining areas, gave rise to floods, causing destruction of crops and property and serious dislocation of traffic and communications. The total rainfall during the monsoon period was deficient in north-east India, but over the country as a whole, it was in excess by 5 per cent. During the latter part of the monsoon, the rainfall was in defect by 9 per cent., the period being marked by a cyclonic storm in the third week of October which accompanied by a tidal wave caused loss of life and considerable damage to property in parts of the Madras province. Taking the year as a whole, the rainfall was generally within 20 per cent. of the normal, except in Gujarat and Rajputana where it was much in excess and in Sind and Mysore, where it was greatly in defect.

From the agricultural standpoint the season can hardly be regarded as satisfactory. The variations in the yields of principal crops were as stated below :—

Rice.—7 per cent. less than in 1944-45, mainly due to decrease in sowing by 5 per cent.

Cotton.—
Sesamum.— } 2 per cent. below the yield of 1944-45.
Sugarcane.—

Groundnut.—19 per cent. less than in 1944-45.

Castorseed.—20 per cent. less than in the preceding season, mainly due to decrease in sowing by 16 per cent.

Jute.—15 per cent. greater than the preceding season's crop, mainly brought about by an increase of 14 per cent. in area as compared with the preceding year.

Wheat (1944-45 crop).—7 per cent. above the yield of 1943-44, mainly due to increase in sowings by 5 per cent.

Linseed (1944-45 crop).—3 per cent. above the yield of 1943-44.

Rape and Mustard (1944-45 crop).—16 per cent. above the yield of 1943-44.

2. Receipts.—The Railway earnings in the year 1945-46, the final year of the War, broke all past records. The gross traffic receipts of the Indian Government railways including worked lines amounted to Rs. 225·74 crores, as compared with Rs. 216·38 crores in the previous year, an increase of Rs. 9·36 crores. After meeting all charges including depreciation and interest on Capital-at-Charge, the year's working resulted in a gain of Rs. 38·20 crores. Out of this surplus Rs. 32 crores were placed to the credit of the General Revenues of the Central Government and the residue, *viz.*, Rs. 6·20 crores was transferred to the Railway Reserve Fund.

A comparison of the results of all Indian Railways with 1944-45, shows a heavy increase in passenger traffic and a slight decrease in the quantity of freight tons carried. The total earnings were, however, larger under both the heads. The increase in passenger earnings was mainly due to an increase in public passengers carried and Military traffic. The average amount earned per passenger per mile was higher in the case of 1st and

3rd class traffic mainly due to increase in short distance traffic. The increase in goods traffic earnings combined with a fall in the average amount earned per ton mile indicates an increase in long distance traffic. The actual figures of certain relevant units compared with the previous year are as follows :—

Items.		1944-45.	1945-46.	Percentage variations.
Number of passengers carried (millions)		926·7	**1,044·3**	+12·7
Passenger miles (millions)		*37,629	**41,336**	+9·9
Earnings from passengers (crores)	Rs.	*76·53	**86·74**	+13·3
Average amount earned per passenger per mile	Pies.	*3·91	**4·03**	+3·1
Average miles a pssenger was carried	Miles	40·6	**39·6**	—2·5
Freight tons carried (millions)		*102·1	**100·6**	—1·5
Net ton miles (millions)		*28,441	**29,166**	+2·5
Earnings from goods carried (crores)	Rs.	*114·68	**116·32**	+1·4
Average amount earned per ton per mile	Pies.	*7·73	**7·65**	—1·0
Average mile a ton of goods was carried	Miles	279	**290**	+3·9

* Revised figures.

3. **Railways and the Legislature.**—Out of a total number of 2,545 questions asked in both the Houses during the year, 362 or 14 per cent. were answered by the Railway Department.

4. **Railway Budget.**—The Railway Budget for 1946-47, as approved by the Standing Finance Committee for Railways, was presented to both the Houses of the Legislature on the 18th February 1946. There was a general discussion on the proposals in the Legislative Assembly on the 20th and in the Council of State on the 21st February 1946. The vote on the demands for grants was taken on the 22nd, the 25th, the 26th and the 27th February 1946.

The general discussion covered various aspects of railway administration, such as priority for the movement of foodgrains, rolling-stock requirements, the manufacture of locomotives and machinery in India, the purchase of new collieries to make railways self-sufficient in the matter of coal, the fixation of the price of coal at a lower level, the departmentalisation of catering on railways, rail-road co-ordination, the employment of ex-servicemen on railways, railway rehabilitation and construction, the wages and allowances of labour and the discomforts of travel, specially in the third class. A cut of Rs. 3,49,98,000 was moved in Demand No. 12—Open Line Works for refusing supplies for investment in road services. The cut motion was made on the ground mainly that the long-term policy of joint rail-road companies consisting of the railways, the Provincial Governments and the existing operators being formed by a process of negotiation was not being implemented, and that in view of the impending restoration of popular ministries in the provinces the present was not an opportune time for pursuing the scheme. By a majority of votes the motion was adopted. There were fourteen motions for token cuts. Three motions made to discuss " the want of policy in new construction ", " Ways and means for meeting the increased operating costs " and " Need for granting a minimum wage of Rs 60 per mensem to railway employees in the lower cadre " were talked out. Five motions moved to discuss the " Policy of Government regarding Cash and Pay Departments on a contractual basis on the Bombay, Baroda and Central India and North Western Railways ", " Reduction in Muslim representation due to retrenchment ", " Extensions to superannuated staff ", " The non-observance of the Muslim quota in railway services " and " Inadequate representation of Sikhs

in railway services " were withdrawn after discussion. The six cut motions which were adopted by the House referred to :—

(i) " The proposal for an enquiry into the present system of management of railways ";

(ii) " The attitude of the Railway Board in staff matters, especially those relating to wages, allowances, working hours, leave arrangements and security of staff ";

(iii) " The financial position and policy of railways ";

(iv) " The manufacture of locomotives and wagons ";

(v) " Inconvenience to passengers "; and

(vi) " Pilferage and delays in settling claims ".

5. Standing Finance Committee for Railways.—The Committee met eleven times during the year. As usual they scrutinized proposals for capital and revenue expenditure to be incurred in the year 1946-47 prior to their being placed before the Legislative Assembly. They also examined and approved the following important proposals :—

(i) Creation of certain permanent gazetted posts on railways and in the Central Standards Office for Railways.

(ii) Purchase of the Sara-Sirajganj, Ahmedabad-Parantij and Mandra-Bhaun Railways, and extension of the agreement for the working of the Tenali-Repalle Railway due for purchase on 1st October 1946 on the revised terms.

(iii) Proposed construction of the Rupar-Talaura Railway to serve the Bhakra Dam Project.

(iv) Restoration of the Cawnpore-Khairada Section of the Great Indian Peninsula Railway.

(v) Advance allotment for general purposes stores for 1945-46 sanctioned in excess of the 60 per cent. limit imposed by the Committee for the placing of advance indents by railways on the basis of the average of the actual purchases for the previous three years.

(vi) Preliminary commitments in connection with the scheme for the manufacture of locomotives in Kanchrapara Workshop.

(vii) The institution of the Railway Betterment Fund.

(viii) Removal of infringements on the Bhore and Thal Ghats on the Great Indian Peninsula Railway.

(ix) Construction of 500 quarters for the staff of the Railway Clearing Accounts Office, Delhi.

The undermentioned important subjects were also discussed by the Committee :—

(i) Formation of Rail-Road Companies under the Managing Agency system in the Central Provinces.

(ii) Investments in road services during 1945-46 and 1946-47.

(iii) Creation of a reserve of uncovered coal at Bokaro Colliery by removing the over-burden.

6. Acquisition of Company Railways by Government.—According to the Government's decision mentioned in last year's report the Dibru-Sadiya Railway and Podanur-Pollachi Railway were purchased on the 1st April 1945 and the 15th October 1945 respectively. The Contracts of the Hoshiarpur-Doab Branch Railways and the Sialkot-Narowal Railway were

terminated with effect from the 31st March 1946. During the current year, Government also decided to buy the following branch lines:—

(i) Sara-Sirajganj Railway with effect from the 1st October 1946. It is a rebate-aided broad gauge line about 54 miles in length, owned by the Sara-Sirajganj Railway Company Limited, and worked by the Bengal Assam Railway.

(ii) Ahmedabad-Parantij Railway with effect from the 1st January 1947. It is a rebate-aided metre gauge line, about 89 miles in length, owned by the Ahmedabad-Parantij Railway Company Limited and worked by the Bombay, Baroda and Central India Railway.

(iii) Mandra-Bhaun Railway with effect from the 1st April 1947. It is a rebate-aided broad gauge line, $46\frac{1}{2}$ miles in length, owned by the Mandra-Bhaun Railway Company Limited and worked by the North Western Railway.

7. **Central Advisory Council for Railways.**—One meeting of the Central Advisory Council for Railways was held during the year. The following subjects were discussed:—

(i) Reduction in the number of classes of passenger accommodation on Railways in the post-war period.

(ii) Nomination of Members of Central Advisory Council for Railways to serve on Local Railway Advisory Committees.

(iii) Catering Policy.

(iv) Amalgamation of Madras and Southern Mahratta and South Indian Railways.

(v) Fees for Members of Sub-Committees of the Local Railway Advisory Committees.

(vi) Amenities for third class passengers.

(vii) Inspection of Railways by Members of the Central Advisory Council.

(viii) Measures adopted to improve cleanliness of stations and passenger coaches.

(ix) Reservation of compartments in trains for Members of the Legislature.

8. **Local Railway Advisory Committees.**—Meetings of the Local Advisory Committees continued as usual. During the year under review, 68 meetings were held as compared with 75 during the previous year. The members were kept fully in touch with all important Railway problems and the recommendations of members were given the fullest consideration and action was taken on them where possible.

Among the important subjects discussed at these meetings, the following may be mentioned:—

(i) Amenities for third class passengers.

(ii) Restoration of train services.

(iii) Ticketless travel.

(iv) Medical inspection of refreshment rooms.

(v) Post-war rating policy.

(vi) Post-war Reconstruction.

(vii) Removal of restrictions in the booking of goods.

(viii) Punctuality of passenger trains and improvements in train services.

(ix) Reservation of accommodation.

(x) Lighting in trains and at stations.

(xi) Porterage charges at stations.

(xii) Reopening of stations closed during the war.
(xiii) Anti-corruption drive.
(xiv) Overcrowding in trains.
(xv) Steps to discourage black-marketing in tickets.
(xvi) Decimalisation of coinage.

9. Railway Rates Advisory Committee.—Dr. Khwaja Sir Mohamed Noor, C.B.E., continued as President and the post of Railway Member remained unfilled during the year. No cases were referred to the Committee during the year.

10. Railways and the War.—With the unconditional surrender of Japan in August 1945 the pressure on the Eastern Line of Communication eased to a great extent during the latter half of the year under review. Some of the curtailed passenger train services were restored, but as coaches lent to the military department were still required for the running of a large number of Military Personnel Specials not much could be done to give adequate relief to the Civilian passenger traffic which broke all past records. Great difficulty was experienced in the procurement of stores of all kinds, and the replacement of worn out and missing fittings still presented a problem that could not be fully solved, with the result that the travelling public were put to much inconvenience. Though the coal situation slightly improved yet the quality being very poor the number of engine failures continued almost on the same scale as in the previous year.

Arrangements were taken in hand for the return of railwaymen on loan to the Army and other Departments to their parent railways. The United States of America Military Railway Service made over to the Bengal Assam Railway the working of the northern portion of the metre gauge section by the middle of October 1945.

Schemes for the co-ordination of Rail and Road Transport were finalised and approved by the Board and the Provincial Governments of Bombay, Madras and the United Provinces, but the operation of the schemes was suspended as the Assembly in February 1946 refused to vote the grants.

11. Damages caused to the Railways by floods and cyclones.—The Bengal Assam Railway was severely affected by floods, chiefly on the metre gauge system. During the period June to August 1945 and again in October 1945, heavy damage was caused on various sections of the metre gauge system due to rains and floods involving, in several cases, interruptions to traffic though fortunately these were mostly of short duration. The total cost of repairing damages and of certain precautionary measures which had to be taken amounted to Rs. 10,33,530 approximately.

A considerable number of staff quarters and service buildings were also affected by storms and cyclones which were mostly confined to the metre gauge system. The total cost of repairs to these damages was Rs. 4,14,600.

Apart from the damages mentioned above, the Bengal Assam Railway had to face and overcome serious river ghat difficulties necessitating, in several cases, the shifting of the ghats. The approximate expenditure incurred on works connected with the shifting of the ghats was Rs. 19,56,750.

On the Bombay, Baroda and Central India Railway breaches occurred between Bhurkhi and Hadala Bhal stations on the metre gauge system and between Maroli and Sachin and Surat and Baroda stations on the broad gauge system causing interruption to traffic for periods ranging from two to eighteen days. The cost of damages amounted to Rs. 2,20,000 approximately.

On the North Western Railway, breaches occurred on certain sections of the Delhi, Ferozepur, Lahore and Quetta Divisions during May-September 1945, resulting in interruption to traffic for periods varying from one to eleven days. The total cost of damage was Rs. 83,200 approximately. In

addition, on 1st October 1945, the spur bund at Samasatta was breached by a sudden flood in the river Sutlej. Special repairs to the spur bund were carried out at a cost of Rs. 84,000 approximately.

On the Madras and Southern Mahratta Railway a severe cyclone struck the coast line between Masulipatam and Cocanada on the night of 17/18th October 1945, causing extensive damage to Tele-communications, Power wires, Signals and Railway buildings. Subsequent heavy rains caused breaches in two places between Gullipadu and Ragupalem stations with resultant interruption to through communication for about 85 hours. The Guntur-Macherla Branch was also similarly affected and there was complete suspension of train services from the 19th to 22nd October 1945. The cost of damage was about Rs. 80,000.

On the Jodhpur Railway abnormally heavy rains at the end of June 1945 caused serious breaches over long stretches of the permanent way on the Samdari-Raniwara and Balotra-Pachpadra branches resulting in interruption to traffic for periods varying from eleven days to three months. The total cost of repairs was Rs. 55,000.

On the East Indian Railway continuous heavy rainfall caused a breach on the Najibabad-Bijnor Section on the Moradabad Division on 12th July 1945 causing interruption to traffic for two days. The cost of damage was approximately Rs. 44,000.

No serious damage was caused by floods or cyclones on other railways during the year under review.

12. Post-war Planning.—The post-war plans of Railways have been prepared on a five-year basis and include, *inter alia*, Rehabilitation, Operative improvements, Staff welfare, Construction of new lines and Restoration of lines dismantled during the war. Some of the important development features incorporated in the railway plans are :—

(i) *Reduction in the number of classes in the post-war passenger trains.*—It has been decided to plan for the provision of only three classes of travel on the Indian Railways, namely :—

I class similar to the present 2nd class but with more comfortable seats, more space, elimination of the dust nuisance, and the possible introduction of ducted air cooling.

II class similar to the present Inter class but with upholstered seats, more space and wider doors.

III class with wider seats, more knee room, more lavatories, sleeping accommodation for a large percentage of passengers, wider doors, and improved interiors and floors.

In addition to the above, Railways will provide air-conditioned coaches on important mail and through trains.

(ii) *Amenities for passengers.*—The post-war plans provide for a considerable increase in the amenities to the travelling public. These aim at :—

(*a*) provision of additional waiting halls at stations including washing and bathing facilities in existing ones,

(*b*) provision of additional refreshment and retiring rooms and improvements to existing ones,

(*c*) provision of foot over-bridges and covered sheds on station platforms,

(*d*) provision of additional waiting rooms for ladies and improvements to existing ones,

(*e*) provision of improved bath rooms in upper class waiting rooms.

The question of the most economical width of coaching stock for affording the best seating accommodation for III class passengers is under investigation and a new layout is being designed to afford better comfort.

(iii) *Amenities for Railway staff*—

(*a*) *Provision of staff quarters.*—A committee was appointed in October 1945 to look into the general question of the scale of accommodation to be provided to the various classes of non-Gazetted railway employees in the post-war period.

(*b*) *Sanitation.*—The post-war plans provide for water-borne sewage systems in large colonies and replacement of present-day system of bucket latrines by septic tank latrines wherever possible.

(iv) *Electrification of Railways.*—Preliminary examination was carried out by railway administrations to find out which sections should be electrified and it was decided to go ahead with the detailed investigation of electrifying about 1,500 miles. These include, among others, the Bombay-Ahmedabad Section of the Bombay, Baroda and Central India Railways, the Howrah-Gaya Section of the East Indian Railway, suburban railways of East Indian, Bengal Assam and Bengal Nagpur Railways around Calcutta and extension of the existing electrified sections of Great Indian Peninsula Railways to Bhusaval in the north and Poona in the south.

(v) *Construction of new lines and replacement of lines dismantled during the war*—

(*a*) The post-war new construction programme of Indian Government Railways has been chalked out in consultation with Provincial Governments. Out of 5,000 miles of new Railway lines proposed, estimates were sanctioned during the year for carrying out surveys of 3,777 miles. Preliminary proceedings in respect of about 50 Railway projects in Indian States were also started, and the views of various Railway Administrations concerned have been invited.

(*b*) 984 miles of railway lines were dismantled during the war to provide materials for urgent military works. Investigations are in hand in respect of restoration of about 115 miles only, as the restoration of the balance was not considered necessary by Railways in consultation with Provincial Governments.

(*c*) Investigations into the proposed conversion of gauges of 4 existing branches of a total length of 415 miles are in hand.

13. Water Softening Committee.—During the year under review Mr. Hancock of the London Midland and Scottish Railway and Dr. Malhotra of the Bombay, Baroda and Central India Railway completed their investigations, referred to in the last annual report, on the subject of water softening for locomotive feed purposes. Consequent on their recommendations the installation of water softening and treatment plants has been sanctioned on certain sections of the North Western, Great Indian Peninsula, Bengal Nagpur, Madras and Southern Mahratta and Bombay, Baroda and Central India Railways as a large-scale experiment. Several plants have been installed and are being operated. The results of this large-scale experiment will indicate whether the use of treated water for boiler feed purposes can be justified generally for Indian Government Railways.

CHAPTER II

FINANCIAL RESULTS

14. Trade Review.—The year 1945-46 witnessed an all-round improvement in the foreign sea-borne trade of British India in private merchandise.

The total value of imports of foreign merchandise in 1945-46 amounted to Rs. 240·5 crores as compared with Rs. 203·6 crores in the preceding year, showing an increase of Rs. 36·9 crores or 18 per cent. The increase was mainly noticeable under machinery, metals and manufactures thereof, coal-tar dyes, woollen yarn and manufactures, electrical instruments, paper, vehicles other than locomotives, etc., for Railways, unmanufactured tobacco, grain, pulse and flour, raw wool, stationery, hardware, liquors, spices, dates, provision and oilman's stores, chemicals, drugs and medicines and tea-chests, while there were decreases under mineral oils, raw cotton, salt and precious stones and pearls, unset.

The total value of exports (including re-exports) similarly rose from Rs. 227·7 crores to Rs. 263·9 crores in 1945-46, showing an increase of Rs. 36·2 crores or 16 per cent. The improvement was mainly brought about by increased exports under raw jute, raw cotton, linseed, jute gunny cloth, fruits and vegetables, tanned or dressed hides and skins and leather, spices, raw wool, coir and wool carpets and rugs, although there were decreases under cotton yarn and piecegoods, jute gunny bags and tea black.

A.—*Railway Convention and Railway Depreciation Fund.*

15. Revision of Railway Separation Convention.—A Committee was appointed by the Legislative Assembly in March 1943 to consider matters arising out of clause (iv) of the Convention Resolution of 1943 reproduced under Appendix "B". The Committee, in their interim report, recommended two enquiries in connection with the Railway Depreciation Fund; (i) an immediate one as to what additional appropriation, if any, should be made to the Depreciation Fund during the war as an emergency provision; and (ii) a comprehensive enquiry, as early as possible, into the lives of the assets, including obsolescence, and the consequent normal rate of contribution to the Depreciation Fund, and any other matters such as the effect of the level of prices on the Fund. As a result of the former enquiry which was undertaken during 1943-44 the Committee decided that an additional appropriation of Rs. 2 crores a year should be made to the Depreciation Fund in that year and the next and that this additional appropriation should continue so long as the present war conditions continued, while the arrears of contribution of Rs. 6 crores for the previous three years should be spread over three years if the general budgetary position permitted. This decision was implemented during the years 1943-44 to 1945-46.

The Committee also recommended that, until the convention is revised, the present rate of contribution to the Depreciation Fund should not be reduced. In order to place railways on a sound financial footing, the Committee further recommended that in allocating the surplus on commercial lines between the railway reserve and general revenues, as provided in clause (iv) of the Convention Resolution, until a new convention is adopted by the Assembly the appropriation to the Railway Reserve should be the maximum consistent with a fair allocation to general revenues as determined from year to year by the general budgetary situation arising out of the present emergency.

During the year under review the Railway Board embarked on a detailed examination of the various problems, such as the future level of earnings and working expenses, the basis of the Depreciation Fund, the rules of allocation, etc., which have a direct bearing on the permanent revision of the Separation Convention.

16. Railway Depreciation Fund Investigations.—In pursuance of the recommendation of the Railway Convention Committee, 1943 (*vide* Appendix B to this Report), in their interim report that a comprehensive enquiry should be made as early as possible into the lives of assets, including their obsolescence and the consequent normal rate of contribution to the Depreciation Fund, and any other matters, such as the level of prices affecting the Fund, Government set up a Depreciation Fund Committee in October 1944. Unexpected difficulties in the way of a thorough and satisfactory investigation during the war were revealed and the Committee had, therefore, to be wound up in December 1944 before it could formulate any definite conclusions.

Towards the end of 1945 it was decided to resume the enquiry by making use of the existing records on the Railways with the minimum of additional labour. The data to be extracted on which the existing assumed lives of various assets for the purpose of the Depreciation Reserve Fund could be checked, was decided upon in consultation with some railways. Before the close of the year a substantial portion of the data had been received from the Railways and was under examination in the office of the Railway Board.

17. Institution of a Railway Betterment Fund.—With a view to finance out of revenue such betterments as do not increase the earning capacity of railways, it was decided to institute a Betterment Fund with effect from the 1st April 1946. Expenditure on the provision of amenities for the travelling public, works connected with staff welfare and unremunerative operative improvements which under the existing rules is chargeable to Capital, will hereafter be met out of the Betterment Fund. The Fund is to start with an initial credit of Rs. 12 crores to be transferred from the Railway Reserve and a sum of Rs. 3 crores from the net profits of 1946-47.

B.—*Financial Results of Indian Government Railways (including worked lines).*

18. Financial Results of Working.—The gross receipts of Railways were Rs. 225·74 crores in 1945-46 against Rs. 216·38 crores in 1944-45, an increase of Rs. 9·36 crores over 1944-45. The increase was both under Goods and Coaching.

The ordinary working expenses amounted to Rs. 145·09 crores against Rs. 123·34 crores in 1944-45, or an increase of Rs. 21·75 crores over 1944-45. The amount set apart from Revenue for Depreciation Fund was Rs. 17·05 crores against Rs. 17·01 crores in 1944-45, or Rs. 4 lakhs more as compared with 1944-45. The operating ratio, that is the ratio of working expenses (excluding suspense, but including Appropriation to Depreciation Fund) to gross earnings was 70·77 per cent. against 65·14 per cent. in 1944-45.

Miscellaneous transactions during 1945-46 resulted in a net receipt of Rs. 4·14 crores against Rs. 3·24 crores in 1944-45. Payments to worked lines as their share of earnings amounted to Rs. 2·36 crores in 1945-46 against Rs. 1·93 crores in 1944-45, or Rs. 43 lakhs more as compared with 1944-45.

The net revenue was Rs. 65·38 crores against Rs. 77·34 crores in 1944-45, or Rs. 11·96 crores less as compared with 1944-45.

The interest charges amounted to Rs. 27·18 crores against Rs. 27·45 crores in 1944-45. The decrease was due mainly to the rate of interest having fallen from 3·63 per cent. to 3·49 per cent.

There was a surplus of Rs. 38·20 crores in 1945-46 against Rs. 49·89 crores in 1944-45. Out of this a fixed amount of Rs. 32 crores net was paid to General Revenues during the year 1945-46. The balance of Rs. 6·20 crores was transferred to the Railway Reserve Fund.

The appropriation to the depreciation reserve fund was Rs. 17·05 crores in 1945-46 against Rs. 17·01 crores in 1944-45. In addition a sum of Rs. 20 lakhs, which was recovered from the Bengal and North Western Railway Company on account of overaged rolling stock was credited to the Fund in 1945-46. The amount withdrawn for renewals was Rs. 12·01 crores in 1945-46 against Rs. 8·18 crores in 1944-45. The net accretion to the fund

in 1945-46 was Rs. 5·24 crores against Rs. 8·83 crores in 1944-45. The balance at the credit of the Depreciation Reserve Fund at the end of the year was Rs. 107·45 crores.

The total works expenditure during the year under review amounted to Rs. 21·86 crores, of which Rs. 9·85 crores were under capital and Rs. 12·01 crores for the Depreciation Reserve Fund against Rs. 14·32 crores in 1944-45.

19. Net traffic receipts, interest charges and surplus.—The statement below compares the surplus and the percentages of the net traffic receipts and interest charges to the capital at charge for the five years ending with 1945-46 :—

(In lakhs of rupees.)

Year.	Net traffic receipts.	Percentage of net traffic receipts to capital-at-charge.	Interest charges.	Percentage of interest charges to capital-at-charge.	Surplus.
1941-42	55,62	7·4	28,44	3·8	28,08
1942-43	71,22	9·1	28,04	3·6	45,07
1943-44	76,59	9·8	28,53	3·7	50,84
1944-45	74,10	9.4	27.45	3·5	49,89
1945-46	**61,24**	**7·7**	**27,18**	**3·4**	**38,20**

20. Traffic Receipts.—During the year under review, there was an increase over the previous year under all the heads of traffic receipts except under other coaching earnings as shown below :—

(Crores of rupees.)

	1944-45.	1945-46.
Passenger earnings	71·50	**79·65**
Other coaching earnings	32·24	**30·61**
Goods earnings	108·55	**111·11**
Sundry earnings	5·06	**6·06**
Suspense	– ·97	**– 1·69**
TOTAL	216·38	**225·74**
Less—		
Earnings of worked lines	4·39	**4·96**
Net traffic receipts of Indian Government Railways	211·99	**220·78**

The total increase including the earnings of worked lines was Rs. 9·36 crores, Rs. 8·15 crores under passenger traffic, Rs. 2·56 crores under goods traffic partly off-set by a decrease of Rs. 1·63 crores under other coaching traffic. The net increase in the traffic receipts of the Indian Government Railways was Rs. 8·79 crores. The increase under passenger earnings occurred under all classes. The distribution of passenger earnings by various classes for all Class I Railways both owned by the Government of India and by Indian States, is given below :—

(In lakhs of rupees.)

	1944-45.	1945-46.
First class	4·33	**4·85**
Second class	7·76	**8·69**
Intermediate class	5·21	**6·12**
Third class	56·23	**63·94**
TOTAL	73·53	**83·60**

The details of traffic earnings of individual railways are given in the Statements Nos. 3 and 6, at pages 40-41 and 48-50 of Volume II of this Report.

21. Working Expenses.—The working expenses of each railway are detailed in Statements Nos. 3 and 7, at pages 40-41 and 52-61 of Volume II of this Report.

22. Losses and gains.—The statement below compares the net gain or loss on each railway with the previous year. For the purpose of calculating

the gain or loss, the figures shown in the Companies' accounts have been recast to accord with the Government accounting procedure, *i.e.*, the working expenses include the appropriation to the depreciation reserve fund and not the actual expenditure on renewals and replacements which is taken into account in the Companies' own accounts :—

(In lakhs of rupees.)

Year.	B. A.	B., B. & C. I.	E. I.	G. I. P.	N. W. Commercial.	N. W. Strategic.	O. T.	B. N.	M. & S. M.	S. I.
1944-45.	5,07	4,87	10,56	11,67	11,24	—1,79	—13	—1,15	3,17	1,91
1945-46.	**1,25**	**4,00**	**6,18**	**6,95**	**5,72**	**—2,41**	**3,41**	**—1,39**	**6,35**	**3,73**

NOTE.—Minus figures indicate losses.

23. Allocation of expenditure on Rolling Stock, Military sidings, etc., between Capital, Revenue and Depreciation Reserve Fund.

(i) *Rolling Stock.*—It has been decided that the special rules of allocation introduced as a war measure to govern expenditure on rolling stock, of which mention has been made in the previous year's Report, will apply only to such stock as had already been ordered including the throwforwards in the 1946-47 rolling stock programme irrespective of the date of delivery and that the cost of new items included in that programme will be allocated according to the normal rules of allocation laid down in the Code rules.

(ii) *Military Sidings, etc.*—It has been decided that the special rules of allocation of which mention has been made in the previous year's Report will not apply to works commenced after 31st March, 1946 but will continue to govern the allocation of the cost of works commenced before that date irrespective of the dates on which they may be completed. The cost of works commenced after 31st March 1946 will be allocated in accordance with the normal procedure laid down in the Code rules. It has also been decided that the *ad hoc* decision to charge 50 per cent. of the expenditure on Telecommunication Schemes to revenue will apply to all Telecommunication Schemes approved by the Board up to 31st March 1946.

24. Effect of war on earnings and working expenses and growth of Receipts and Expenditure.—Although hostilities in World War II ceased in August, 1945, traffic conditions continued to be abnormal throughout the year under review. The reversion to normal peace-time traffic was slow, due mainly to heavy troop movements and the priority system of control of movements. Earnings in the year reached the highest figure ever achieved on Indian Railways and closed at about Rs. 227½ crores. This represented an increase of about Rs. 10 crores over the previous year, made up mainly of Rs. 9½ crores more under full fare passenger traffic, Rs. 3 crores more under Military Specials, Rs. 4½ crores more under Goods traffic in General Merchandise and Rs. 3¼ crores more under sundry earnings and other heads, offset by a decline of Rs. 6½ crores under Parcels and Rs. 3¾ crores under Military Goods Traffic. Excluding the earnings that remained in Suspense, the gross traffic receipts of the year amounted to Rs. 225¾ crores, also the highest figure of receipts in the history of Indian Railways.

Ordinary working expenses also soared to the record figure of Rs. 143·91 crores excluding Suspense and Rs. 145 crores including it. The former exceeded the previous year's figure by Rs. 19⅓ crores. Special debits to revenue of a portion of the cost of works and rolling stock purchased during the war, *vide* paragraph 26 of the Report for 1944-45, accounted for Rs. 20 crores of the total as against Rs. 19 crores in the previous year. The rest of the increase was due to the grant of more liberal dearness allowance, higher losses on grainshops with an increased range of commodities on sale and the full reflection of the reduction in selling prices made in October, 1944, the cost of additional staff, increase in the quantity and cost of stores consumed and more expenditure on fuel.

25. Analysis of Financial Results of Working.—An analysis of the Financial Results of the working of the Indian Government Railways is given in the following Statement for 1944-45 and 1945-46 :—

(Figures in thousands of rupees.)

Railways.	Capital at charge.	Deduct amount of capital contributed by Companies and Indian States.	Net Government Capital at charge.	Receipts	Working Expenses including Depreciation.	Payments to worked lines.	Net Receipts.	Percentage of net Receipts on capital at charge.	Charge against net revenue receipts: Payments on account of share of surplus profits.	Charge against net revenue receipts: Interest charges.	Gain.	Loss.
Indian Government Railways												
B. A.—												
1944-45	83,21,92	3,00	83,18,92	28,38,94	20,25,99	19,77	7,93,18	9·5	..	2,86,08	5,07,10	..
1945-46	**84,04,68**	**3,00**	**84,01,68**	**28,00,93**	**23,69,33**	**19,79**	**4,11,81**	**4·9**	..	**2,86,39**	**1.25,42**	..
B. N.—												
1944-45	81,58,73	7	81,58,66	18,37,83	16,26,77	1.67	2,09,39	2·6	30,62	2,93,67	..	1,14,9
1945-46	**81,41,47**	..	**81,41,47**	**20,90,00**	**19,47,25**	**91**	**1,41,84**	**1·7**	..	**2.80,44**	..	**1,38,6**
B. B. & C. I.—												
1944-45	75,80,48	1,27.97	74,52,51	20,68,05	12,91,42	35,61	7,41,02	9·8	..	2,53,78	4,87,24	..
1945-46	**76,23,82**	**1,27,97**	**74,95,85**	**21.34,05**	**14,48,45**	**35,10**	**6,50,50**	**8·5**	..	**2,50,49**	**4,00.01**	..
E. I.—												
1944-45	1,52,02,10	..	1,52,02,10	41,41,95	25,34,98	..	16,06,97	10·6	..	5,50,89	10,56,08	..
1945-46	**1,56,88,00**	..	**1,56,88,00**	**42,09,36**	**30,45,63**	..	**11,63,73**	**7·4**	..	**5,45,88**	**6,17,85**	..
G. I. P.—												
1944-45	1,13,24,70	..	1,13,24,70	35,81,56	19,94,20	43,58	15,43,78	13·6	..	3,76,83	11,66,95	..
1945-46	**1,15,03,95**	..	**1,15,03,95**	**34,51,43**	**23,44,68**	**39,50**	**10,67,25**	**9·3**	..	**3,72,28**	**6,94,97**	..
M. & S. M.—												
1944-45	53,34,54	..	53,34,54	16,23,30	10,63,97	21,28	5,38,05	10·1	24,23	1,97,11	3,16,71	..
1945-46	**53,23,31**	..	**53,23,31**	**18,89,26**	**10,36,05**	**20,58**	**8,32,63**	**15·6**	..	**1,97,40**	**6,35,23**	..
N. W.—												
1944-45	1,47,37,92	..	1,47,37,92	35,51,92	20,34,13	56,93	14,60,86	9·9	..	5.16,11	9,44,75	..
1945-46	**1,48,76,40**	..	**1,48,76.40**	**37,75,49**	**28,82,62**	**53,80**	**8,39,07**	**5·6**	..	**5,07,57**	**3.31,50**	..
O. T.—												
1944-45	28,56,99	..	28,56,99	7,20,77	6,25,29	..	95,48	3·3	..	1,03,41	..	12,93
1945-46	**30,54,75**	..	**30,54,75**	**7,93,43**	**3,26,21**	**8.08**	**4,59,14**	**15·0**	**1,28**	**1,16,94**	**3,40,92**	..
S. I.—												
1944-45	45,77,65	80,47	44,97,18	11,82,17	7,83,31	15,67	3,83,10	8·4	44,30	1,47,47	1,91,42	..
1945-46	**44,16,67**	**80,47**	**43,36,20**	**13,28,93**	**7,56,94**	**58,63**	**5,13,36**	**11·6**	..	**1,40,09**	**3,73,27**	..
Other Railways—												
1944-45	6,05,08	..	6,05,08	91,70	55,32	..	36,38	6·0	..	14,91	21,47	..
1945-46	**6,51,95**	..	**6,51,95**	**1.00,88**	**56,46**	..	**44,42**	**6·8**	..	**20,23**	**24,19**	..
Interest on Depreciation and Reserve Fund Balances—												
1944-45	..	..	..	4,65,23	..	..	4,65,23	..	..	..	4,65,23	..
1945-46	..	..	..	**4,92,59**	..	..	**4,92,59**	..	..	..	**4,92,59**	..
Net Miscellaneous Receipts and charges not attributable to any one railway—												
1944-45	..	..	..	..	..	..	..	..	..	..	..	40,6
1945-46	..	..	..	..	..	..	..	..	..	..	..	77,31
Total Central—												
1944-45	7,87,00,11	2,11,51	7,84,88,60	2,21,03,42	1,40,35,38	1,94,51	78,73,53	10·0	99,15	27,45,26	49,88,47	..
1945-46	**7,96,85,00**	**2,11,44**	**7,94,73,56**	**2,30,66,35**	**1,62,13,62**	**2,36,39**	**66,16,34**	**8·3**	**1,28**	**27,17,71**	**38,20,04**	..
Provincial Railways—												
1944-45	..	..	..	91	..	..	91	..	..	..	91	..
1945-46	..	..	..	**92**	..	..	**92**	..	..	..	**92**	..
N. W. (Commercial)—												
1944-45	1,14,83,46	..	1,14,83,46	33,26,21	17,41,76	56,93	15,27,52	13·3	..	4,03,20	11,24,32	..
1945-46	**1,16,20,33**	..	**1,16,20,33**	**35,43,52**	**25,20,40**	**53,80**	**9,69,32**	**8·3**	..	**3,97,25**	**5,72,07**	..
N. W.— Non-Commercial (Strategic).												
1944-45	32,54,46	..	32,54,46	2,25,71	2,92,37	..	—66,66	—2·0	..	1,12,91	..	1,79,57
1945-46	**32,56,07**	..	**32,56,07**	**2,31,97**	**3,62,22**	..	**—1.30,25**	**—4·0**	..	**1,10,32**	..	**2,40 57**

C.—*General results of working of all Indian Railways.*

26. Analysis of Earnings.—The total earnings of all Railways including those in which the Government of India have no financial interest, amounted to Rs. 243·59 crores of which Rs. 116·32 crores or 47·8 per cent. were from goods traffic, Rs. 86·74 crores or 35·6 per cent. from passenger traffic and Rs. 40·53 crores or 16·6 per cent. from parcels, luggage and other miscellaneous sources of revenue.

26.1. Passenger Earnings.—In comparison with 1944-45 passenger earnings on all Indian Railways increased by Rs. 10·21 crores to Rs. 86·74 crores, an increase of 13·3 per cent., the number of passengers carried increased by about 118 millions, an increase of about 12·7 per cent. and passenger miles by 3,707 millions, an increase of about 9·85 per cent. Some of the striking variations in passenger traffic on individual railways are indicated below :—

(Figures in lakhs.)

Railways.	Variations as compared with 1944-45. Passengers carried. No.	Earnings. Rs.
Bengal Assam	+140	+135
Bombay, Baroda and Central India .	+197	+76
Great Indian Peninsula . . .	+152	+218
Madras and Southern Mahratta .	+110	+101
North Western	+155	+140
South Indian	+187	+108

Detailed figures of the number of passengers carried, passenger miles and earnings are given in Summary X and Statements Nos. 12 and 36, at pages 12-13, 92-99 and 227-233 respectively of Volume II of this Report.

26.2. Goods Earnings.—The earnings from goods traffic on all railways increased by Rs. 1·64 crores or 1·43 per cent. as compared with 1944-45. The tonnage of goods carried decreased by 15 lakhs of tons or about 1·47 per cent. and each ton was carried an average of approximately 290 miles instead of 279 miles last year. The net ton miles registered an increase of 725 millions or 2·55 per cent. over last year.

The increased earnings were mainly derived from Fire-wood; Rice not in the husk; Salt; Wood unwrought; Cotton raw pressed; Kerosene oil; Cement; Cotton manufactured; Jute raw; Iron and Steel wrought; Tobacco; Vegetable oils and other commodities, while decreases were substantial in Jawar and Bajra; Sugar refined and unrefined; Petrol (in bulk); Gur, Jagree, Molasses, etc. Jute manufactured; Kerosene oil in tins and Military traffic.

The heaviest increase in goods traffic was registered on the Bengal Nagpur Railway where the tonnage carried on the system increased by 0·80 million (4·34 per cent.), ton miles by 196·6 millions (5·60 per cent.) and earnings by Rs. 49 lakhs (4·44 per cent.).

Detailed goods statistics will be found in Summary X, Statements Nos. 13, 29 and 36, at pages 12-13, 100-111, 161-176 and 227-233 respectively of Volume II of this Report.

CHAPTER III

NEW CONSTRUCTION AND ENGINEERING WORKS

27. Capital Expenditure.—At the end of March 1946, the total capital at charge on all Railways, including those under construction amounted to Rs. 872·68 crores of which Rs. 796·85 crores was capital at charge on Indian Government Railways inclusive of premia paid in the purchase of Companies lines. The remainder Rs. 75·83 crores represented capital raised by Indian State, Companies and District Boards.

The Capital at charge of Indian Government Railways is composed as follows :—

	£
Liability and debt incurred in purchase of railways .	150,106,630
Less liability and debt cancelled by the operation and annuities and sinking funds	29,284,941
Net amount outstanding	120,821,689*
	(In thousands of rupees.)
Direct expenditure by Government	6,35,75,00
The above sterling figures converted into rupees .	1,61,10,00*
Grand Total	7,96,85,00

By far the greater portion of this amount, namely Rs. 7,94,73,55,000 is Government capital and only Rs. 2,11,44,000 is owned by Companies, etc. These figures include Rs. 32,56,07,000 on account of capital expenditure to the end of March 1946 on strategic lines.

The total capital outlay on all railways during 1945-46 was Rs. 10·11 crores of which Rs. 9·85 crores related to Indian Government Railways.

The distribution of the capital outlay in 1945-46 over the different Indian Government Railways is shown in the summary below :—

(Figures in lakhs.)

Railways.	Open Lines.			New Lines.	GRAND TOTAL.
	Works, etc.	Rolling stock.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.
Bengal Nagpur . . .	—6	—11	—17	..	—17
Bombay, Baroda & Central India	1	42	43	..	43
Bengal Assam	76	6	82	..	82
East Indian	4,79	12	4,91	..	4,91
Great Indian Peninsula . .	1,37	42	1,79	..	1,79
Madras & Southern Mahratta .	—20	4	—16	..	—16
North Western . . .	1,31	8	1 39	..	1,39
South Indian.	—1,53	—8	—1,61	..	—1,61
Oudh Tirhut	1,60	38	1,98	..	1,98
Other Indian Railways . .	47	..	47	..	47
TOTAL .	8,52	1,33	9,85	..	9,85

* £2,575,000, £2,000,000, £1,500,000 and £1,000,000 representing share capital of the Great Indian Peninsula, Bombay, Baroda and Central India, the Madras and Southern Mahratta and the South Indian Railways respectively (the first two sums paid off during the year 1925-26 and 1941-42 respectively and the last two during the year 1944-45) have been converted at the appropriate average rate of exchange for those years and the balance £113,746,689 at the rate of 1*s*. 6*d*. to the rupee.

28. Mileage of lines opened or sanctioned in 1945-46.—No new lines were sanctioned for construction during the year.

24·00 miles of railways were opened to public traffic during the year, as under :—

Name of line	Gauge	Mileage	Owner	Working Agency	Date of opening
New Bhopal Chord line added to Bhopal-Ujjain Railway.	5′ 6″	1·09	Indian Government.	G. I. P.	1945-46
Line taken over by the Executive Engineer, Kanchrapara, in connection with H.L.R. B.D.C. Avoiding line, etc.	5′ 6″	2·86	Do.	B. A.	Do.
Increase in length due to additions, alterations and conversion of single line to double line, etc.	5′ 6″	9·52	Do.	B. N.	Do.
Khargpur Avoiding line . . .	5′ 6″	8·11	Do.	Do.	14-1-46
Raipur Avoiding line . . .	5′ 6′	2·42	Do.	Do.	24-10-45

29. Surveys and Lines under construction during 1945-46.—No new constructions were undertaken during the year though some new surveys were sanctioned. Out of the two sections Mudkhed-Adilabad (to be constructed by His Exalted Highness the Nizam's State Railway) and Fatehpur-Bissau (to be constructed by the Jaipur State Railway) which were reported in previous years to have been suspended, the former has been re-started during the year 1945-46.

30. Lines closed during 1945-46.—During the year under review the Mohuda Avoiding line on the Bengal Nagpur Railway was closed and a portion thereof dismantled to meet further demands of track material for military works. It was selected for dismantlement as the purpose for which it was originally constructed, ceased to exist.

31. Engineering Works.—The following is a list of some of the important works carried out or sanctioned during the year under review with a view to augmenting the line capacity, improving operational facilities, providing additional housing accommodation for staff and strengthening bridges, etc. :—

31.1. Open Line Improvements.

Bengal Assam Railway.

	Amount in Rs.
1. Provision of additional tracks in the goods yard at Naihati	3,33,849
The traffic working in the goods yard at Naihati increased to a considerable extent and in order to cope with the increased traffic, provision of additional tracks was considered essential.	
2. Remodelling of carriage stabling and washing lines; and shifting the existing sick lines and constructing Head train examiner's office, carriage shed, etc., at Narculdanga	7,31,019
The yard at Narculdanga did not provide adequate facilities for stabling and washing of carriages and placing wagons in the sick line, etc. The scheme would reduce shunting hours and detention to stock.	
3. Improved facilities for Running Shed at Narculdanga .	2,47,538
The Narculdanga Sheds and Yard remodelling was completed in 1928. Since this time the position has changed due to an increase in the engine mileage and the introduction of the scheme for intensive use of Loco. power. The existing facilities were, therefore, considered insufficient for shed repairs and quicker turn round of engines. The scheme was accordingly sanctioned in March 1946.	

East Indian Railway.

	Amount in Rs.
4. Additional facilities to deal with increased facilities at Mandah Road	2,16,303
To facilitate smooth movement of traffic on the Moghalsarai-Allahabad Section and to permit the section being worked to its full capacity, it was felt that the back shunt sidings in all the stations on the section should be converted into direct entrance loops. This was particularly necessary at Mandah Road which is also a watering station.	
5. Extension of Loco. Shed for co-ordinated examination and shed shopping at Asansol	5,52,025
With the increase in engine stock on the East Indian Railway, the capacity of workshops, particularly at Asansol, which is one of the largest and is situated in the busiest centre, was taxed to the maximum limit. The provision of the additional facilities will give better maintenance and consequently better engine usage.	
6. Additions and alterations in Up and Down Yards at Burdwan Station—Phase I	3,61,443
At Burdwan Yard there is no direct exit for Up goods trains from the Burdwan up receiving yard. This caused delay to the departure of goods trains and also led to detentions to passenger trains. To eliminate this, it was decided to remodel the Burdwan Station Yard.	
7. Doubling the Phalgu Bridge	31,89,263
Phalgu Bridge was considered to be a bottle neck in the free flow of traffic to and from Gaya. To eliminate this bottle neck, doubling of Phalgu Bridge was taken in hand.	

Great Indian Peninsula Railway.

8. Removal of infringements on Bhore and Thull Ghats .	1,84,00,000
The removal of infringements on the Bhore and Thull Ghats on the Great Indian Peninsula Railway has for a long time been considered necessary. The scheme which is of outstanding importance is likely to absorb about 100 subordinate staff, 2,900 skilled and 8,000 unskilled labourers for a period of about three years.	

Madras and Southern Mahratta Railway.

9. Avoiding loops between Tinnanur and Thiruvalangadu including provision of staff quarters	2,75,282
This work was necessary to provide additional crossing facilities between Madras and Arkonam to enable increased traffic to be handled with greater operating efficiency and a consequent reduction in operating costs.	

Permanent-way Renewals.

Bengal Nagpur Railway.

10. Relaying 15·0 miles of 75 lb. rails on steel trough sleepers with 90 lb. R.B.S. rails on new steel sleepers between Kargi Road and Khongsara from mile 472·0 to mile 487·0 on the Katni Branch	9,72,033
The work is part of the scheme for gradual replacement of the 75 lb. track on the Katni Branch with heavier rails both from the point of view of carrying the present day heavier traffic and of obtaining 75 lb. rails for "spot" renewals on the remainder of this Branch and on other Districts.	

Bengal Nagpur Railway—contd.

	Amount in Rs.
11. Re-railing 20·451 miles of 90 lb. B.S. Rails with 90 lb. R.B.S. rails between Jharsuguda and Himgir . .	5,37,946

The released rails will be required for casual renewals on other sections of the Railway.

Madras and Southern Mahratta Railway.

12. Relaying wooden sleepers and fittings with steel sleepers and fittings on existing 90 lb. 'R'FF track for 20·8 miles from mile 280-North East Line (19·8 miles main line and 1 mile sidings)	10,28,933

This work was sanctioned to release wood sleepers for casual renewals, as the greater part of the Railways' requirement of broad gauge sleepers for renewals during the year under review were supplied in steel sleepers which are not suitable for spot renewals in a wood sleeper track.

31.2. Important Works Sanctioned.

Bengal Assam Railway.

1. Provision of Main Stores Depôt (including electric lighting) at Saidpur	8,20,800

A main stores depôt (including electric lighting) at Saidpur was sanctioned for efficient handling of stores for the greatly increased metre gauge mileage of the Railway and recent appreciable increase in rolling stock, plant and equipment.

2. (*a*) Construction of temporary quarters for staff at various stations on the Bengal Assam Railway, sanctioned under several estimates	40,72,094
(*b*) Provision of ganghuts in Lumding, Lalmanirhat and Amingaon Districts	3,00,778

The temporary quarters and ganghuts were constructed to house the additional staff required to meet the operational and emergent demands during the war.

3. Three storied 6 units Blocks for senior subordinates (control staff) at Sealdah	2,05,674

These quarters were constructed for the staff of the Operating Areas and Calcutta Area Controls to house them near their work in the interest of railway efficiency.

4. Construction of an upper storey to the General Hospital at Dacca and quarters for the District Medical Officer and the nursing staff	1,09,000

Provision of 24 additional beds for indoor patients and of more accommodation for the outdoor patients was necessitated by the increased number of patients treated in this hospital.

Bombay, Baroda and Central India Railway.

5. Permanent works in connection with anti-malarial measures on the broad gauge system	2,22,760

Permanent works such as covering water tanks and wells, paving around wells, providing pucca drains to staff quarters, etc., in connection with anti-malarial measures on the broad gauge system, were sanctioned to protect staff from malaria.

North Western Railway.

6. Improvements to watering arrangements in Karachi Area	6,93,297

This work is necessary as the existing Municipal pipes are becoming incrusted and have to be replaced. The new pipe lines will run in railway land.

North Western Railway—contd.

	Amount in Rs.
7. Construction of 500 quarters at Kishenganj, Delhi, for the staff of the Railway Clearing Accounts Office .	68,61,130
The provision of quarters for the staff of the Railway Clearing Accounts Office has been a long standing necessity. The difficulty in obtaining housing accommodation in Delhi as a result of war and expansion of the office made the situation extremely acute. It was accordingly decided to construct 500 quarters for the use of the staff of that office through the agency of the Central Public Works Department.	
8. Acquisition of land at Karachi City and Karachi Cantonment required for construction of staff quarters . .	4,44,718
To meet the demand for staff quarters, the construction of which was suspended during the war, land has been acquired to house essential Railway staff at Karachi City and Karachi Cantonment.	
9. Acquisition of land near Mayo Gardens, Lahore, for Officers' bungalows	2,60,000
To relieve the shortage of residential accommodation for railway officers posted at Lahore, 6·916 acres of land has been acquired for building officers' bungalows during the post-war period.	

31.3. Bridge Strengthening and Protection Programme.

Bengal Assam Railway.

1. Extension of the left guide bank of Hardinge Bridge from Chain 90 to Chain 99·78. (1313-W)	7,80,000
2. Extension of left guide bank of Hardinge Bridge from Chain 99·78 to Chain 109	7,80,000
The works were required in the interests of safety and were undertaken by stages, as necessity arose.	

Bengal Nagpur Railway.

3. Replacing girders of Langulia Bridge No. 1383 at miles 469·655 between Pondura and Dusi stations on the East Coast section	5,65,633
Almost every member of the main girders and of the floor system of the spans of this bridge had become so weak that certain types of locos. overstressed them even at speeds of 4 m.p.h. The strengthening of these was not practicable.	
4. Construction of Protection Works due to erosion of the left guide bank of the Rup Narain River immediately upstream of the Bengal Nagpur Railway Bridge . .	13,08,758
The river was eroding its left bank upstream of the railway bridge rapidly and the work was intended to check the erosion which would have endangered the railway embankment.	

Bombay, Baroda and Central India Railway.

5. (i) Rebuilding bridges Nos. 478, 479 and 480 between Kim and Kosamba damaged due to heavy floods in September 1945	10,32,000
(ii) Replacing existing girders with girders of M.L. Standard in connection with these Bridges	3,30,000
During heavy floods in September 1945, the approaches and piles of these bridges on the main line were seriously damaged and it was necessary to undertake this work.	
It was considered desirable to take this opportunity to replace the girders by M. L. Standard and release F. B. girders as reserve for future emergencies.	

North Western Railway.

	Amount in Rs.
6. Renewing the existing seven 100 ft. spans of the Nari Bridge 18/Q on Sibi-Quetta Sections, with triangulated girder spans	6,13,096

The main girders and flooring of the bridge were overstressed by 10 per cent. and 110 per cent. respectively under the present class of engines running on this section. As the strengthening of the girders was not an economical proposition it was proposed to renew them outright.

Madras and Southern Mahratta Railway.

7. Rebuilding 14 bridges on the North East Line	3,18,000

The stone masonry of these bridges was of poor quality and was deteriorating. In the interest of safety rebuilding these bridges with stronger material was found necessary.

32. Wireless Communications on Railways.

General.—The development of wireless communication on all Indian Government Railways is progressing satisfactorily and most of the Railways are now effectively spanned by efficient wireless networks interconnecting all important junctions and transhipment termini with the District and Railway Headquarters.

Towards the end of the year, Railways have been transmitting well over 150,000 messages per month over their wireless networks. This figure is rapidly rising.

Equipment.—General Headquarters, India, continued to supply wireless equipment. Fifty medium power wireless stations were issued as a permanent payment issue and 30 more of the same type were promised.

Current Development.—The Madras and Southern Mahratta Railway Administration have been requested to undertake experiments of installing and working wireless equipment on running trains so that contact could be maintained with stations and control points. These experiments will be undertaken as soon as suitable equipment is available in the market.

33. Improvements to Line Telecommunications on Railways.—The Indian Railways Telecommunications (Line) Improvement Scheme which was finally decided upon after full consideration of the reports submitted by Majors Carter and Lamb provides for the following telecommunication circuits :—

Number of Circuits.	Class.	Route Miles.
41	Administrative Trunks	7,964
43	Deputy Controllers Circuits	7,434
25	Section Controllers Circuits	2,366
11	Telegraph Circuits	1,330
120		19,094

Out of the above, 18 Administrative Trunks (3,161 route miles), 7 Deputy Controllers Circuits (930 route miles), 15 Section Controllers Circuits (835 route miles) and 7 Telegraph Circuits (476 route miles) have been constructed by the Posts and Telegraphs Department and made over to Railways. A full complement of technical equipment for using these circuits has also been supplied to Railways.

It is anticipated that the balance of this work will be completed by the Posts and Telegraphs Department by the end of next year.

CHAPTER IV

TRANSPORTATION

A.—Operating.

34. Volume of traffic handled.—The year under review saw the final phase of the War and though hostilities ceased in August 1945, traffic characteristics throughout the year remained more or less the same as during the War. With the cessation of the War the problems connected with demobilisation came to the forefront causing heavy demands on rail transport well above the level of the previous year. The volume of traffic handled, both passenger and goods, in 1945-46, was greater than in 1944-45, and greatly in excess of the pre-war traffic. On Class I Railways, the increase in passenger miles—the best unit for measuring the passenger traffic handled —was 10·1 per cent. and that in ton miles—the best unit for measuring the freight traffic handled—was 2·6 per cent. as compared with the preceding year. These increases, it should be noted, do not include the large volume of traffic moved by military special trains. The following statement shows the amount of traffic handled and the increases recorded over the preceding year and over the pre-war year (1938-39).

(Figures in thousands.)

Particulars.	Class I Railways.				
	1938-39* (pre-war).	1944-45.	**1945-46.**	**Percentage increase (+) or decrease (—) as compared with** 1938-39.	**1944-45.**
Passenger miles	18,072,018	36,365,575	**40,046,014**	+121·6	**+10·1**
Net ton miles†	21,462,533	27,741,154	**28,461,768**	+32·6	**+2·60**

* For comparative purposes, Bikaner State Railway (which was not a Class I Railway at that time) has been included.

† Excludes departmental.

35. Train miles.—The number of train miles run to carry the traffic referred to above was as follows :—

(Figures in thousands.)

Particulars.	1938-39* (pre-war).	1944-45.	**1945-46.**	Percentage variation with 1938-39.	**1944-45.**
Passenger (including proportion of mixed) train miles.†	111,503	84,274	**91,547**	—17·9	**+8·63**
Goods (including proportion of mixed) train miles.‡	69,172	76,089	**79,502**	+14·9	**+4·49**

* For comparative purposes, Bikaner State Railway (which was not a Class I Railway at that time) has been included.

† Includes the mileage of trains conveying passengers and of all other traffic booked at coaching rates, and empty mileage run by passenger and other coaching stock. It also includes mileage of electric locomotive and electric multiple unit trains as well as military specials but excludes departmental.

‡ Includes mileage of electric locomotive trains but excludes departmental.

It will be noticed that as compared with the preceding year there was an increase of 8·63 per cent. in passenger train services. Railways however handled 10·1 per cent. more passenger miles than in 1944-45. The various steps taken to minimise the effect of inadequate passenger train services are detailed in Chapter VIII, paragraph 106.

The increase of 2·60 per cent. in ' Net Ton Miles ' resulted in an increase of 4·49 per cent. in goods train mileage and this disparity in the rate of increase between the two factors was mainly due to a decrease in the average load per wagon chiefly caused by a change in the pattern of traffic.

Detailed figures of train miles of Class I Railways are given in Statements Nos. 17 and 32, pages 120-121 and 219-222, and those of Class II and III Railways in Statement No. 37, pages 234-238 of Volume II of this Report.

In the paragraphs below the results of passenger and goods train services on Class I Railways are reviewed separately for the two principal gauges :—

36. Passenger Trains.

(Figures in thousands.)

Particulars.	Class I Railways.					
	Broad Gauge.			Metre Gauge.		
	1944-45.	**1945-46.**	**Percentage variation with 1944-45.**	1944-45.	**1945-46.**	**Percentage variation with 1944-45.**
Passenger miles . . .	26,377,162	**28,824,807**	**+9·28**	9,604,330	**10,793,428**	**+12·4**
Coaching vehicle miles (including proportion of mixed).	994,612	**1,085,569**	**+9·14**	418,560	**461,601**	**+10·3**
Passenger train miles* (including proportion of mixed).	59,793	**65,001**	**+8·71**	22,529	**24,567**	**+9·05**

* Includes the mileage of trains conveying passengers and of all other traffic booked at coaching rates, and empty mileage run by passenger and other coaching stock. It also includes mileage of electric locomotives and electric multiple unit suburban trains, as well as military specials but excludes departmental.

It is evident from the figures given above that in spite of some increase in passenger services the overcrowding of trains continued as acutely as in the previous war years due to the continued increase in passenger traffic. On the broad gauge railways, the percentages of increase in passenger miles, and passenger train miles were nearly uniform, namely 9·28 and 8·71 respectively. But on the metre gauge, whilst passenger miles increased by 12·4 per cent., passenger train miles recorded an increase of 9·05 per cent. only.

36.1. Punctuality of passenger trains.—The following table shows the percentage of passenger trains not losing time to the total number of trains run on all Class I Railways during 1945-46 as compared with 1944-45 :—

	All trains (including electric multiple unit trains).	Mail and important through trains.	Mixed trains.	Suburban trains.	Other passenger trains.
Broad Gauge.					
1944-45	69·3	59·7	68·7	73·2 77·3*	61·8
1945-46	**70·0**	**58·8**	**70·7**	**71·7** **78·4***	**62·6**
Metre Gauge.					
1944-45	74·1	48·8	73·9	91·3 91·9†	70·3
1945-46	**76·4**	**56·5**	**78·7**	**86·2** **91·5†**	**71·3**

* Bombay, Baroda and Central India and Great Indian Peninsula Railways' electric multiple unit trains.

† South Indian Railway's electric multiple unit trains.

The improvement noticed in the previous year continued under all headings both on the broad and metre gauges except that there was a slight deterioration in the case of " Mail and important through trains " and of Suburban (steam) trains on the broad gauge whilst on the metre gauge there was a set-back only in the case of Suburban trains, both steam and electric.

36.2. Restoration of passenger train services.—Owing to very heavy military transport requirements during the war, it was necessary to curtail passenger train services in order to release locomotives, coaching stock and provide train paths to meet the War Department demands for transport. The total daily passenger train mileage curtailed on this account on Class I Railways was 72,308 (B.G.) and 43,530 (M.G.).

With the cessation of hostilities the question of restoration of train services was immediately taken up by Railway Administrations but progress in this direction was necessarily slow owing to the fact that heavy demobilization and repatriation movements had still to continue and the War Department were unable therefore to release any substantial number of passenger vehicles loaned to them during the war. Besides, rolling stock which had to be run during the war without normal periodic attention suffered considerable wear and tear and had to be taken into Shops for complete overhaul and in some cases, rebuilding.

In spite however of the many difficulties which the Railways had to contend with as a result of the war, they were able to restore passenger train services to the extent of 30,223 (B.G.) and 18,764 (M.G.) daily passenger train miles up to the end of March 1946.

37. Goods Trains.

(Figures in thousands.)

Particulars.		Class I Railways.				
		1938-39*. (Pre-war)	1944-45.	**1945-46.**	Percentage variation with 1938-39.	Percentage variation with **1944-45.**
Goods (including proportion of mixed) ton miles.†	B.G.	18,283,959	23,209,859	**24,026,787**	+31·4	**+3·51**
	M.G.	3,092,002	4,423,502	**4,329,181**	+40·0	**—2·13**
Wagon miles (including proportion of mixed).	B.G.	2,117,936	2,155,858	**2,339,872**	+10·5	**+8·54**
	M.G.	663,822	901,063	**879,049**	+32·4	**—2·44**
Goods train miles (including proportion of mixed.)	B.G.	48,018	50,417	**54,435**	+13·4	**+7·97**
	M.G.	19,400	23,853	**23,204**	+19·6	**—2·72**

* For comparative purposes, Bikaner State Railway (which was not a Class I Railway at that time) has been included.

† Excludes departmental.

On the broad gauge railways goods ton miles increased by 3·51 per cent., wagon miles by 8·54 per cent. and goods train miles by 7·97 per cent. when compared with the preceding year whilst on the metre gauge railways, goods ton miles, wagon miles and goods train miles decreased almost uniformly by 2·13 per cent., 2·44 per cent. and 2·72 per cent. respectively. The biggest decrease under all the three heads was naturally on the metre gauge system of the Bengal Assam Railway, which fed the Line of Communication in Assam on which goods traffic dwindled with the cessation of hostilities.

37.1. Goods Train Speeds.—The average speed of goods trains on the broad gauge increased from 10·0 miles per hour in 1944-45 to 10·2 miles in 1945-46.

whilst on the metre gauge the average speed remained stationary at 10·2 miles per hour. The improvement on the broad gauge is attributable to the slight easing of the strain thrown on line capacity on some of the more important through routes towards the latter part of the year.

37.2. **Goods Train Loads.**—On the broad gauge railways the average net or freight load per goods train (steam) decreased from 460 tons in 1944-45 to 440 tons in 1945-46 whilst on the metre gauge railways there was a slight increase from 185 tons in 1944-45 to 187 tons in 1945-46 due mainly to less empty haulage on the latter railways. The highest increase was noticeable on the metre gauge system of the South Indian Railway which recorded an average increase of 15 tons per train, from 209 tons in 1944-45 to 224 tons in 1945-46.

38. **Stock Usage.**—With the provision of more engines, the average number of engines available for use increased by 6 per cent. on the broad gauge and 2 per cent. on the metre gauge as compared with the previous year. The average daily mileage run by the engines did not show any improvement on the broad gauge but on the metre gauge there was an increase of 2 per cent. All the railways, however, made special efforts to improve the usage of wagons and locomotives. In the following sub-paragraphs the stock usage results of Class I Railways during the year are briefly reviewed.

38.1. **Engine Usage.**—Measured in terms of engine miles per day per engine on line (*i.e.*, inclusive of time occupied under repairs, etc.), the daily mileage remained steady at 77 on the broad gauge and 69 on the metre gauge when compared with the preceding year. The percentage of engines under or awaiting repairs in Mechanical and Transportation Workshops, however, went up from 16·1 per cent. on the broad gauge and 13·9 per cent. on the metre gauge in 1944-45 to 16·4 per cent. and 15·8 per cent. respectively during the year under review due mainly to repairs postponed during the war years.

The actual ton miles per goods locomotive day dropped both for the locomotives on line and the locomotives in effective use on the broad gauge as well as on the metre gauge :—

	Broad Gauge.		Metre Gauge.	
	Net ton miles per goods locomotive day on line.	Net ton miles per goods locomotive daily in use.	Net ton miles per goods locomotive day on line.	Net ton miles per goods locomotive daily in use.
1944-45	16,523	24,938	7,307	11,704
1945-46	**15,963**	**24,138**	**6,978**	**11,333**

Details of engine usage are given in Statement No. 22, pages 136 to 139 of Volume II of this Report.

38.2. **Wagon Usage.**—" Wagon miles per wagon day " denoting the average number of miles run per wagon daily both loaded and empty journeys, showed a slight increase on the broad gauge railways from 40·0 miles in 1944-45 to 41·6 miles in 1945-46 whilst on the metre gauge railways there was a deterioration from 39·3 miles to 31·5 miles during the same period.

The more comprehensive unit for the purpose of gauging the work performed by a wagon is " Net ton miles per wagon day " which shows the number of miles run by a wagon as well as the load carried by it. As a result of a drop in the average load of wagons brought about by a change

in the general pattern of traffic dealt with and unbalanced traffic, this figure shows a decrease as noted below :—

	Broad Gauge.		Metre Gauge.	
	1944-45	**1945-46.**	1944-45.	**1945-46.**
Net ton miles per wagon day	438	**433**	199	**163**

Both these units as at present compiled, however, understate the performance of railways inasmuch as the wagon days in these calculations refer to the total wagon stock available on the railways although quite a large number of these wagons were rendering service on military specials.

Details of vehicle and wagon miles and their usage are given in Statements Nos. 19 and 24, pages 130 to 133 and 142 to 143 of Volume II of this Report.

38.3. **Wagons loaded with " Smalls ".**—With the end of the hostilities during the year and slight easing of the wagon position restrictions on the movement of " smalls " were somewhat relaxed towards the end of the year with the result that there was an increase in the number of wagons loaded with " smalls " as shown below :—

	No. of wagons loaded with "smalls".		Percentage increase in comparison with	No. of wagons loaded with 'smalls' expressed as a percentage of the total number of wagons loaded.	
	1944-45.	**1945-46.**	1944-45.	1944-45.	**1945-46.**
Broad Gauge . .	*425,667	**452,909**	+ 6·40	*9·03	**9·13**
Metre Gauge . .	*305,687	**348,949**	+ 14·2	*10·9	**12·3**

* Revised figures.

39. Improvements in Marshalling and other yards and their working.

working.—The following were some of the improvements effected in the yards :—

Madras and Southern Mahratta Railway.—During the year two additional lines were brought into use in the East Hump Marshalling yard at Tondiarpet. Loudspeakers were installed in Rayapuram Goods yard to enable yard work to be carried on more efficiently.

His Exalted Highness the Nizam's State Railway.—The remodelling of the Marshalling yards at Secunderabad and Kazipet was in progress during the year.

East Indian Railway.—Two additional lines were provided in the Moghalsarai Up yard forming part of a more extensive scheme and it is anticipated that when further additions and alterations are carried out, the working of the yard will be improved considerably.

Remodelling of Traffic yards at Burdwan, Ondal, Asansol, Dhanbad and Jhajha as also the provision of two additional lines in the Allahabad yard are also in progress. The completion of these works will improve the facilities for dealing with both Goods and Passenger Traffic.

40. Wagon Position.

40.1. **Broad Gauge Wagon Pool.**—The number of public service wagons (in terms of four-wheelers) in use at the end of the year was 167,819, *i.e.*, 10,813 more than at the end of 1944 45. The total number of wagons loaded during the year was 4,747,927 being an increase of 247,255 or 5·49 per cent as compared with the previous year. Demands throughout the year exceeded the available wagon supply.

The number of wagons temporarily out of service on all Broad Gauge Railways varied between 6,954 and 8,915 wagons.

40.2. Metre Gauge Wagon Pool.—The number of public service wagons (in terms of four-wheelers) on 31st March 1946 was 66,772, *i.e.*, 1,345 more than at the end of 1944-45. The total number of wagons loaded during the year was 2,219,183 being a decrease of 89,523 or 3·88 per cent. as compared with the previous year.

41. Neutral Examination of Interchanged Stock.—The staff working under the Director of Wagon Interchange continued to examine wagons interchanged between Railways at the following junctions:—

Broad Gauge.	*Metre Gauge.*
Agra Cantonment.	Katihar.
Agra East Bank.	Kasganj.
Ajni (Nagpur).	
Chheoki.	
Ghaziabad.	
Khanalampura.	
New Delhi.	
Waltair.	
East Dock Junction.	

Certain staff under the Director of Wagon Interchange were also posted at Moghalpura, Lillooah and Jhansi Workshops for the purpose of examining wagons after periodical overhaul.

42. Operating—General.—During the first half of the year 1945-46, there was an increase in the tempo of military operations against Japan and as a consequence, railways were called upon to cater for still heavier movements of military personnel and stores to the operational centres in the East. There was need for more intensive utilization of the coaching stock and with this end in view, the 49 Standard Block Rakes formed during 1944 were broken up and reformed into 62 rakes. This stock was further supplemented by a loan to the Defence Department of 11 rakes for special operational moves.

With the cessation of hostilities in August 1945, the War Department were requested to release coaching stock to railways to the greatest extent possible in order to permit of the restoration of passenger train services curtailed during the war, but not more than 4 standard Block Rakes could be returned to railways owing to heavy military commitments in connection with embarkation, disembarkation, evacuation from East Bengal and demobilization programmes. In fact, with the increase in demobilization, more military mail trains had to be run between fixed points. Coaches reserved on important Mail, Express and Passenger trains for the exclusive use of military personnel also continued to run.

43. Replacement of the Director General of Railways (Calcutta Area) by Railway Liaison Officer (Calcutta Area).—In 1944, to meet the war time needs, the organisation of the Director General of Railways (Calcutta Area) was brought into being. With the cessation of hostilities, it was decided that such a high power organisation was no longer necessary, but to ensure that there was no reduction in the degree of co-ordination existing between the four Calcutta Railways while the abnormal railway transport problems in the Calcutta area created by the war still existed, the temporary post of a Liaison Officer (Calcutta Area) was created with effect from November 1945 and that of the Director General abolished with effect from the same date.

The Railway Liaison Officer works under a panel of General Managers of the East Indian, Bengal Assam and Bengal Nagpur Railways and the Traffic Manager of the Calcutta Port Commissioners, the senior General Manager being the Chairman of the panel. The function of the new organisation is to continue most of the work started by the Director General of Railways with some modifications, the most important being the withdrawal of mandatory powers.

44. Transport of coal.—During the year 1945-46, the control on the distribution of coal continued through the Deputy Coal Commissioner (Distribution) in the office of the Coal Commissioner under the administrative control of the Department of Supply, Government of India.

The dual post of Deputy Coal Commissioner (Distribution) and Transport Advisory Officer to the Railway Board continued up to the middle of January 1946, whereafter the post of Transport Advisory Officer to the Railway Board was abolished.

The production of coal increased during 1945-46 and the Railways, with the curtailment of the movement of military traffic due to the cessation of hostilities were able to carry an increased quantity of coal to the consumers.

As traffic on the Railways increased, so railway coal consumption increased, and a similar increase occurred in all essential industries, thus causing an increase in coal traffic on the railways.

The increase in production and transport of coal was, however, only able to meet the minimum requirements of essential industries.

The Deputy Coal Commissioner (Distribution) kept in close communication with all Railways, the resulting liaison minimising many difficulties of distribution and transport which arose at frequent intervals.

44.1. Coal supply and coal stock position.—The improvement in the local supply position, which became visible early in 1945, continued till the coal stocks on Railways reached the level of 16·7 days' requirements on 31st May 1945. This improvement could not, however, be maintained, owing to shortage of labour in the coalfields, and consequently the stock position again commenced to deteriorate. Unfortunately, this deterioration occurred at a time when, with the cessation of hostilities in Europe, the war effort against Japan was being intensified and the demands on Indian Railways and industries were at their heaviest, and this became a source of considerable anxiety to all concerned. With the unconditional surrender of Japan in August, however, and the prompt closing down of many Military projects, a great improvement in the labour situation in the coalfields became almost immediately apparent. The increase in output, which resulted during the following months, made it possible to build up Railways' stocks to a more adequate level and the highest figure for the year, equivalent to 19 days' requirements, was recorded on the 20th of October 1945. Subsequently, the seasonal exodus of labour from the coalfields for harvesting prevented this level being maintained and the general coal position again became acute towards the end of the year. The shortage at its height was aggravated for a time by an unfortunate outbreak of sickness to an unprecedented extent in epidemic form amongst the running staff of the East Indian Railway and despatches to up-country stations were in consequence adversely affected. About the same time a shortage of coastal craft prevented the full quota of coal being sent by sea to the Railways and industries of Southern India. Railway stocks therefore, again dropped to an uncomfortably low level of 14 days' requirements on 10th January 1946.

With the improvement in raisings from January 1946 onward and consequent increased supplies to Railways, the stock position resumed an upward trend and the stocks gradually rose to 15·1 days' requirements at the end of 1945-46, a slight improvement of 0·6 day as compared with the position at the end of the previous year.

The acute shortage of higher grades of coal, mentioned in the previous report, also continued during the year under review, necessitating the use of larger quantities of inferior coal, and this seriously affected operating efficiency.

B.—*Commercial.*

45. Alterations in rates and fares.—There was no change in the basic fares and rates for passenger, parcels and other coaching, and goods traffic, and the supplementary charge continued to apply at the same level throughout the year. The measures undertaken in previous years to discourage movement of non-essential traffic to conserve transport capacity were continued; but wherever it was possible, without serious detriment to the movement of military and essential civilian traffic, a policy of relaxation in the war-time restrictions was followed, especially during the latter part of the year.

The more important changes in the rates and fares were :—

(*a*) *Passenger Fares.*—The following concessions in fares were permitted :—

(i) First and Second Class return tickets on payment of single fares to delegates and office-bearers of the All-India Women's Conference.

(ii) Second Class tickets on payment of half second class fares to scholars undergoing training in the Inland Fisheries under the Madras Fisheries Training Scheme.

(iii) Extension of the usual Indian Railway Conference Association concessions to athletes and athletic teams participating in the All-India Olympic Games held at Bangalore in February 1946, to Hockey Teams participating in the Inter-provincial Hockey Tournaments at Calcutta, and in the Delhi Cloth Mills Hockey Tournament and to the Young Women's Christian Association Summer Conference.

(iv) The rules for the reservation of Upper Class accommodation were revised with the object of securing uniformity; advance reservations were limited to a maximum of ten days and were made subject to journey tickets being purchased; a deduction of 10 per cent. was prescribed on refunds on unused tickets purchased to secure reservations.

(*b*) *Parcels and other Coaching Traffic*—

(i) The concession of free carriage of exhibits intended for the International Contemporary Art Exhibition organised by the All-India Fine Arts and Crafts Society was granted.

(ii) Restrictions imposed on the movement of certain commodities as luggage and parcels were relaxed in respect of movements in Local booking over some railways.

(*c*) *Goods Traffic*—

(i) The concession of free carriage was allowed in respect of exhibits intended for show at the International Contemporary Art Exhibition.

(ii) Investigations regarding the rectification of circuitous routing with a view to move traffic by the shortest and/or the most economic routes were continued.

(iii) Special rates at which little or no traffic was moving were examined and cancelled, where permissible, with a view *inter alia* to facilitate introduction in future of special rates at a level consistent with conditions which might then be prevailing. This investigation has not been completed on all railways and is still in progress.

(iv) On the Great Indian Peninsula Railway, the rules and rates for the carriage of fodder during periods of scarcity provided for in the Indian Railway Conference Association Goods Tariff were applied to traffic from certain stations and *viâ* to stations situated in the Belgaum, Bijapur, Dharwar, Ahmednagar, Poona, Satara and Sholapur Civil Districts in accordance with instructions received from the Government of Bombay.

(v) On the Oudh Tirhut Railway, special rates for gunnies were withdrawn and for traffic in jaggery, timber wrought and timber unwrought, C/J, C/C and C/D Schedule rates respectively were introduced generally, in supersession of the existing rates.

(vi) On the East Indian Railway, the following important enhancements in rates were made :—

(*a*) The Exceptional Classification equal to 2 OR; W/160; LD/200 for furniture, theatrical equipment and camp equippage, etc., was withdrawn.

(*b*) Certain enhancements in rates were effected in respect of tea, cotton full-pressed, paper N.O.C. and Methylated Spirit.

(vii) On the N.W. Railway, the following important alterations were effected :—

(*a*) The Punjab Mines Scale of Rates for coal traffic in wagon loads has been extended to apply to traffic from Jammu Cantonment, the station serving the coal mine recently discovered in Kashmir State.

(*b*) The exceptional classification equal to 2 OR; W/160; L; D/200 for camp, circus and theatrical equippage, furniture and household effects, was withdrawn.

(*c*) The rate for Tanstuffs was altered from Schedule L/T; OR; WR/250; L to Schedule L/T *plus* 20 per cent. OR; L, the enhanced percentage corresponding to the extra loading capacity over 250 maunds.

General.—

(i) On the Oudh Tirhut and Bengal Assam Railways, many of the war-time restrictions on the normal through-booking arrangements with steamer companies to certain riverine stations and *viâ* by the rail-*cum*-steamer routes were withdrawn.

(ii) The military control on the working of the Chittagong Port was terminated on 30th September 1945 and peace-time arrangements were resumed by the Bengal Assam Railway; the port was opened for public goods traffic, including the Clan Line traffic; port charges on certain items were, however, enhanced due to increased working expenses.

46. Efforts to secure better wagon usage and wagon loads.—To meet the demands for transport which continued to be heavy during the year, the special measures adopted by railways during the previous years for securing better usage of wagons and improved wagon loads were pursued and extended. Nominated loading was adopted wherever possible. On the Oudh Tirhut and South Indian Railways, the unloading and delivery of goods on Sundays and holidays were continued and special efforts were also made to increase the loading on these days. The speeding up of the movement of wagons, co-ordination of movements between districts and close liaison between Departments, with the purpose of achieving a more intensive usage of wagon stock and locomotive power, continued to receive the special attention of

Railway Administrations. On the Bengal Assam Railway, the uniflow or periodical one-way system of train running whereby goods trains were only run in one direction during certain periods of the day, to expedite transit time, was continued.

All possible measures for eliminating avoidable wagon delays were adopted; wagon rates based on carrying and loading capacities of different types of wagons referred to in the last year's report were extended wherever possible. On the Bengal Assam Railway, weighment of wagon loads of salt booked from salt booking stations on the Bengal Nagpur Railway was eliminated, charges being levied on the basis of the fixed standard weight per bag. A policy of enhancing minimum weight conditions applicable to commodities wherever the nature of goods offered scope for such action with a view to improve wagon loads initiated three years back was continued during the year under review.

Utilisation of oil tanks and special types of wagons received the constant attention of the railways. The strict control on the regulation of "smalls" traffic through the quota system of acceptance, nominated loading and increasing the minimum load of through-road vans was continued during the year, which resulted in a reduction in the number of repacking points and consequent delays.

47. Co-ordination of Rail-Road and Water Transport.—In pursuance of the mandate given to the Central Government by the Assembly in April 1945, railways were asked to submit concrete proposals for setting up Joint Stock Companies in collaboration with Provincial Governments. Schemes pertaining to the Madras and Bombay Presidencies and to the United Provinces were finalised and approved by the Railway Board and Provincial Governments, but their introduction was suspended in consequence of the grant for funds being refused by the Assembly in February 1946. The *ad hoc* Committee appointed by the Assembly recommended postponement of the schemes pending their consideration by popular Ministries in the Provinces.

Brief particulars of those schemes and of relief services inaugurated by railways are indicated in the following paragraphs:—

Bombay, Baroda and Central India Railway.—The Bombay Government accepted the Rail-Road Co-ordination scheme and announced its policy in a press-note, dated 12th June 1945. The scheme sponsored by the Provincial Government was prepared in consultation with the Bombay Railways. The Presidency was roughly divided into 11 zones with a company to operate in each. The Railway was entrusted with the formation of companies in zones 1, 2 and 3, with a 30 per cent. shareholding in each. Sanction to the issue of capital was accorded by the Examiner of Capital Issues.

Negotiations were undertaken with road interests in the Ahmedabad Municipal area for a "pick up and delivery" service.

Great Indian Peninsula Railway.—This Railway was concerned with the promotion of companies in zones 4, 5, 6, 7 and 11 in the scheme sponsored by the Bombay Government and sanction to the issue of capital was granted by the Examiner of Capital Issues.

In addition, the Great Indian Peninsula Railway became associated with two road companies in the Central Provinces and Berar. They acquired shares to the value of Rs. 3,46,800 in the Nagpur Omnibus Company Limited, subsequently known as the Provincial Transport Company Limited, out of the issued capital of Rs. 10 lakhs; and shares worth Rs. 5,73,750 representing 75 per cent. of the Railway's share holding of Rs. 7,65,000 in the Central Provinces Transport Services Limited. The latter company afforded considerable relief to the Railway by providing road transport between Badnera and Amraoti thus enabling the Railway to withdraw their branch line service for use elsewhere.

The Poona-Bombay Goods Service was operated throughout the year with a fleet of 20 lorries switched over from Poona-Ahmednagar. This service was, however, found to be economically unsound and the contract was terminated with effect from the 3rd April 1946.

Passenger relief services were inaugurated between Bombay and Poona and also radiating from Poona to Nira, Lonand, Ahmednagar, Sholapur, Pandharpur, Baramati, Dhond, Loni, Kedgaon, Dehu Road and Lonavala. These services were operated by contractors, the Relief Services Limited. No financial commitments by the Railway were involved in this scheme. The contractors pay a royalty of anna one per bus mile, if their average earnings per bus mile do not exceed annas 12 for three calendar months and annas $1\frac{1}{2}$ if they do. In return, the Railway makes suitable arrangements for the comfortable booking of passengers, *viz.*, the use of Railway waiting halls, the provision of booking and parking places, the use of Railway weighing machines, and where necessary, the use of Railway communications, etc. The cost of publicity is borne by the Railway and in order to prevent leakage of revenue an efficient outdoor staff is maintained for checking the services. The monthly royalty paid by the contractors works out on an average to Rs. 10,000 approximately.

East Indian Railway.—Three Joint Stock Companies, (1) The Bundelkhand Roadways Limited, (2) The Hind Roadways Limited and (3) The Oudh Roadways Limited, to operate passenger traffic by road in the area served by the East Indian Railway in the United Provinces were registered during the year under review. 235 vehicles were purchased by the Railway. The Companies, although registered, have for want of funds been unable to commence operation.

Negotiations, which had the approval of the Bengal Government, were entered into with the West Bengal Bus Syndicate, Asansol, for the formation of Joint Stock Companies in the Asansol area. These had to be suspended for want of funds for investment.

The Howrah-Asansol Goods Road Service continued to run during the year under review. The operation of the service was found to be financially unsound owing to maintenance difficulties and also to light running of lorries on account of unbalanced traffic. A proposal to run a goods service on the Lucknow-Cawnpore route was abandoned after careful consideration and 32 lorries acquired in this connection were disposed of at the prices originally paid.

At the instance of the Railway Board, the possibility of inaugurating "pick up and delivery" services for goods and parcels in Calcutta and other large centres was placed under examination.

Oudh Tirhut Railway.—During the year under review this Railway assisted the promotion of three Joint Stock Companies, *viz.*, (1) The Gogra Transport Company, Gorakhpur, (2) The South East United Provinces Transport Company, Allahabad and (3) The Rohilkhand Transport Company, Bareilly. The schemes were approved by the Railway Board and the United Provinces Government, and sanction for the issue of capital was accorded by the Examiner of Capital Issues as follows :—

	Authorised Capital.	Issued Capital.	Date of Registration.
	Rs.	Rs.	
Gogra Transport Co.	50 lakhs.	25 lakhs.	9th January 1946.
South East U. P. Transport Co. . . .	50 ,,	20 ,,	18th December 1945.
Rohilkhand Transport Co.	50 ,,	20 ,,	28th December 1945.

226 vehicles were purchased by the Oudh Tirhut Railway for the use of these Companies which, however, although registered, have not for want of funds been able to operate.

The agreement with the Indian General Navigation Company for transport of Assam Government supplies by the rail-*cum*-river route continued.

South Indian Railway.—Negotiations for the formation of tripartite road companies with the operators in the Nilgiri District fell through for want of agreement between the operators and the railway. Negotiations were opened with T. V. Sundaram Iyengar and Sons, Madura, with the object of floating a Joint Stock Company for operating road services in the Madras Presidency. A scheme for the formation of a Company to be known as " Southern Roadways Limited " was finalised and received the approval of the Railway Board and the Provincial Government. This scheme had to be abandoned for want of funds.

The lorry service introduced in June 1944 for the transport of goods and parcels in the Nilgiri Hills continued to operate between Coimbatore and Ootacamund, but the fleet was reduced from 25 to 7 in March 1946 owing to a decline in traffic.

Negotiations were entered into with the Bombay Steam Navigation Company for the carriage of through goods traffic by the sea-*cum*-rail route from stations on South Indian Railway to Bombay, Kathiawar, Karachi, etc., and *vice versâ viâ* Cochin and Mangalore.

His Exalted Highness the Nizam's State Railway.—The passenger branch of the State road service continued to be the main source of revenue. The enhanced standard basic fare of O.S. 9 pies per passenger mile, introduced with effect from 1st September 1942 remained unchanged. The policy of discouraging travel for Jathras and Uruses during the war period was continued. 20·4 million passengers were carried during the year as compared with 19·2 million passengers in the previous year, and the passenger miles were 195 millions as against 182 millions in 1944-45, and total bus miles 9·22 millions as against 8·92 millions. The average earnings per bus mile for the year were 166·1 pies as compared with 160·5 pies in the previous year and the average occupation ratio was 84 per cent. as compared with 81 per cent. in 1944-45.

The special cartage services for transporting foodgrains by road from the interior to the nearest railheads for onward despatch by rail were continued. 252,500 tons of foodgrains were carried by the road services as compared with 115,700 tons during the previous year.

The goods collection and delivery services at Hyderabad, Secunderabad and Warangal continued to operate. The earnings realised from these services amounted to Rs. 1,904 in 1945-46 as compared with Rs. 3,641 for the previous year. The rail share of earnings of traffic carried by these services amounted to Rs. 12,497 in 1945-46 as against Rs. 22,909 in 1944-45. The decrease in traffic is attributed to the control on the movement of foodgrains by the Hyderabad Commercial Corporation.

Questions relating to rail-road co-ordination were discussed at joint meetings of the heads of the Commercial, Operating and Road Transport Departments of the Railway.

Madras and Southern Mahratta Railway.—This Administration was concerned in the promotion of the companies proposed for zones 8, 9 and 10 in the Bombay Presidency.

The lorry service introduced in March 1945 between Madras and Bangalore was maintained throughout the year under review and worked satisfactorily and provided considerable relief to the Railway.

North Western Railway.—This Administration was concerned with the promotion, under the United Provinces Government's scheme, of a Joint Stock Company known as the Ganges Valley Transport Company Limited with headquarters at Meerut. Fifty vehicles were purchased by the railway for resale to the Company, whose promoters, the Gwalior and Northern India Transport Company Limited undertook the body building. The company was registered after sanction to the issue of capital was obtained from the Examiner of Capital Issues, but shared the same fate as other companies in the United Provinces and for want of funds never commenced operation.

Following the Sind Government's declaration in favour of rail-road co-ordination, a pilot scheme for floating a company to operate on the Karachi-Hyderabad route was drawn up by the Sind Government in collaboration with the Railway. This scheme had likewise to be abandoned.

The road services operated by the Pindi-Kashmir Transport Company Limited, North Western Transport Company and Kulu Valley Transport Company, in which the North Western Railway are majority shareholders, worked satisfactorily and profitably during the year under review.

The two lorry services, operated departmentally on the Lahore-Multan and Lahore-Nagrota sections continued during the year under review, but the relief afforded by the former became less necessary and the Railway Board approved of this service being abandoned.

Bengal Nagpur Railway.—This railway is associated with the Great Indian Peninsula Railway in the two road companies operating in the Central Provinces and Berar, *viz.*, Central Provinces Transport Services Limited, and Provincial Transport Company Limited. The former company introduced road services between Ramtek and Nagpur and Kamptee and Nagpur which enabled the Railway to withdraw their rolling stock for use elsewhere.

Proposals to run road services by Joint Stock Companies in which railways would be permitted 25 per cent. shareholdings were discussed with the former Government of Orissa, but negotiations terminated after the Central Assembly refused funds for investment.

Bengal Assam Railway.—The Bengal Government favoured co-ordination of rail and road transport and the running of such services by Joint Stock Companies, and selected the following routes:—

(1) Calcutta-Ranaghat.
(2) Calcutta-Jessore.
(3) Calcutta-Mathurapur Road.
(4) Calcutta-Diamond Harbour.

The Provincial Government invited applications from operators to undertake promotion of companies on these routes, but no tangible progress had been made up to the time the Bengal Assam Railway had, for want of funds, to disassociate.

The Assam Government also favoured rail-road co-ordination and the Bengal Assam Railway submitted proposals to the Provincial Motor Transport Controller, Assam, for inaugurating road passenger services operated by Joint Stock Companies on the following routes:—

Route	Valley
(1) Pandu-Nowgong	Assam Valley.
(2) Nowgong-Silghat-Jorhat	Assam Valley.
(3) Jorhat-Dergaon-Furkating	Assam Valley.
(4) Jorhat-Mariani-Furkating	Assam Valley.
(5) Jorhat-Sibsagar	Assam Valley.
(6) Sibsagar-Dibrugarh	Assam Valley.
(7) Dibrugarh-Tinsukia-Ledo-Saikhoaghat	Assam Valley.
(8) Silchar-Badarpur-Karimganj	Surma Valley.
(9) Karimganj-Sylhet Bazar	Surma Valley.
(10) Karimganj-Patharkandi-Juri-Kulaura	Surma Valley.

The assistance of the Assam Government was sought by the Railway for the selection of suitable promoters, but nothing concrete had emerged up to the time when it became necessary for the railway to withdraw.

The road service between Siliguri and Bagrakote, operated departmentally from October 1944, was closed down in June 1945 with the approval of the Railway Board, as the service proved financially unsound and showed recurring losses.

The question of co-ordinating inland water transport with rail and road transport was examined by the Bengal Assam Railway, whose conclusions were referred to the Provincial Governments concerned.

48. Closer contacts with business interests.—Close contact continued to be maintained with trade, commerce and industry, and there were a number of meetings with Chambers of Commerce, trade associations and merchants at important centres. Discussions covered a variety of subjects such as booking and transport facilities, continued restrictions on bookings, delays to goods in transit, settlement of claims, improved methods of packing and re-opening of train halts. These contacts afforded a useful means of fostering better relations and understanding between the railways and trade, commerce and industry.

49. Claims for compensation and refunds.—On most of the Railways there was a heavy increase in the number of claims, and applications received for refund of overcharges on goods and parcels as compared with the previous year. The amount paid also went up appreciably.

The factors contributing to this increase were chiefly as follows :—

(*a*) Pilferage and theft due to scarcity of essential commodities;

(*b*) General rise in the price of all commodities making thieving more remunerative;

(*c*) Non-availability of suitable packing materials and containers; and

(*d*) Inadequate or non-marking of consignments resulting in mis-despatch.

The number of claims unsettled at the close of the year under review has consequently increased when compared with the figures of the previous year. Special efforts, however, to accelerate the disposal of claims continued with the result that there was a decrease in the average number of days involved in settlement of claims and refund cases.

As regards action taken to reduce claims, periodical meetings with the Police were held at which cases of thefts, pilferages, etc., on notorious sections were discussed and necessary precautionary measures were adopted. Press propaganda for the guidance of the public for marking of goods was carried on. Additional staff for the disposal of claims was engaged and the strength of Watch and Ward staff was considerably increased.

The Convention agreed upon by the principal railways to eliminate unnecessary correspondence in regard to the question of inter-railway liability and to speed up the settlement of claims, which was introduced at the end of 1943 and which as stated in the last year's report was extended for the duration of War, was further extended to 31st March 1947.

The following statements for Class I Railways show for 1945-46 :—

(A) the number of claims in respect of goods or parcels damaged or lost received and for goods and parcels over-charged and the average time taken in their settlement;

(B) the number and value of claims paid in respect of goods or parcels lost or damaged under main causes;

(C) the number of court cases in respect of goods or parcels lost, damaged or delayed and their disposal.

STATEMENT A.

Item No.	Particulars.	B. A.	B. N.	B., B. & C. I.	E. I.	G. I. P.	Jodhpur.	M. & S. M.	Mysore State.	N. S.	N. W.	O. T.	S. I.
1	Number of claims involving compensation for goods or parcels lost, damaged, or delayed carried over as unsettled at the close of the preceding year.	5,429	15,927	2,990	2,700	9,460	1,912	3,788	4,577	1,355	11,263	3,795	2,160
2	Number of claims received (and re-opened) for compensation on account of goods or parcels lost, damaged, or delayed during the current year.	38,167	29,500	24,089	52,959	53,853	5,425	17,014	9,150	4,329	74,371	18,453	10,62
3	Number of claims referred to in items 1 and 2 settled during the year.	38,451	35,023	22,473	50,969	41,284	5,404	17,029	8,407	3,771	75,794	13,864	5,068
4	Balance outstanding as unsettled at the close of the year.	5,105	10,404	4,606	4,690	22,029	1,933	3,773	5,320	1,913	9,840	8,384	1,738
5	Net amount paid in compensation. Rs.	46,81,058	25,69,642	8,30,266	24,36,843	20,11,471	42,268	4,55,710	70,014	11,298	22,45,142	2,08,134	3,30,077
6	Percentage sum paid in compensation (item 5) borne to gross earnings.	1·23	1·67	0·6	0·90	0·89	0·34	0·24	0·9	0·02	0·59	0·47	0·49
7	Average time taken in settlement of claims shown under items 1 & 2.	72	156	45	23	455	112	845	140	78	29	57	53
8	Number of applications received for refunds on goods and parcels overcharged.	14,245	3,173	12,812	11,604	13,200	1,439	9,413	2,367	*	11,187	2,390	18,321
9	Average time taken in settlement of claims shown under item 8.	63	149	67	36	57	56	29	93	*	23	131	25

* Information not available.

STATEMENT B.

Item No.	Particulars.		B. A.	B. N.	B., B. & C. I.	E. I.	G. I. P.	Jodhpur.	M. & S. M.	Mysore State.	N. S.	N. W.	O. T.	S. I.
1	Claims paid on account of goods lost.	No.	2,671	8,357	6,971	17,131	12,040	1,337	5,892	48	651	6,116	982	1,998
		Value Rs.	4,22,655	12,18,879	4,26,499	23,25,363	6,49,375	64,041	4,51,982	5,607	42,270	2,00,912	11,031	76,879
2	Claims paid on account of goods stolen.	No.	141	3,564	111	1,623	1,675	158	17	..	74	2,791	1,473	62
		Value Rs.	90,218	6,34,926	11,496	1,35,433	95,967	8,207	5,297	..	3,814	1,21,955	1,83,052	27,407
3	Claims paid on account of goods damaged by wet.	No.	1,351	41	329	414	1,778	9	71	4	31	58	19	77
		Value Rs.	1,06,938	8,099	16,739	17,595	74,801	808	6,204	1,536	1,696	808	7,631	10,055
4	Claims paid on account of goods damaged by fire.	No.	1	4	10	..	75	..	8	..	..	19	4	3
		Value Rs.	4,090	91,578	4,986	..	30,878	..	3,080	..	..	4,020	2,045	4,276
5	Claims paid on account of goods damaged by breakage.	No.	27	55	90	30	566	13	85	..	73	5	7	69
		Value Rs.	2,074	7,428	4,352	7,766	34,163	460	3,821	..	4,228	1,487	344	2,154
6	Claims paid on account of parcels and luggage lost and stolen.	No.	6,538	3,489	2,435	4,760	3,061	315	2,348	..	85	1,030	1,055	1,017
		Value Rs.	15,98,061	4,28,665	1,33,086	3,32,395	1,35,748	11,487	1,95,414	..	5,045	29,398	93,100	31,934
7	Claims paid on account of other causes.	No.	6,852	1,477	363	692	5,127	156	265	1,812	601	4,028	567	1,842
		Value Rs.	23,01,949	5,20,660	63,065	88,968	2,80,624	10,927	36,061	62,871	21,145	2,33,868	1,16,474	86,959

STATEMENT C.

Item No.	Particulars.	B. A.	B. N.	B., B. & C. I.	E. I.	G. I. P.	Jodhpur.	M. & S.M.	Mysore State.	N. S.	N. W.	O. T.	S. I.
1	Number of suits filed in court (or pending from the previous year) for the recovery of compensation in respect of goods or parcels lost, damaged or delayed.	3,117	2,313	682	2,282	2,263	84	651	212	60	2,469	1,345	179
2	Number of such suits settled out of court.	1,273	1,187	117	554	401	10	217	33	15	358	119	45
3	Number of suits dismissed.	64	139	35	251	21	7	81	10	2	178	126	45
4	Number of suits decreed	104	161	12	205	13	*Nil*	43	*Nil*	*Nil*	130	80	18
5	Number of suits pending	1,676	826	458	1,272	1,828	67	310	167	43	1,803	1,020	71

NOTE.—Information for Bikaner State Railway is not available.

50. Prevention of Ticketless Travel.—There was an increase in the number of passengers detected travelling without tickets on almost all principal railways. In the aggregate the increase over last year, amounted to 6 lakhs.

The measures adopted for the check and collecting of tickets remained generally the same as in previous years. There was an increase in the ticket checking and examining staff on several railways due to formation of additional Flying Squads.

Surprise checks continued to be carried out with good results; on some railways the checks were conducted by District Officers and on others under the supervision of the Watch and Ward Superintendent. On some railways periodical checks were organised with the dual object of preventing ticketless travel and irregular travel on foot-boards, roofs, etc. Several railways had also to post special staff at selected stations to check Military Personnel and issue Excess Fare Tickets for unexchanged warrants.

A greater number of Special Magistrates were posted at selected stations and Mobile courts also operated on certain railways with satisfactory results. Overcrowding and inadequate lighting of compartments continued to add to the difficulties of checking in trains.

The special organisation set up some years ago by the East Indian Railway, continued to function satisfactorily, its activities covering a wider field than that of ticket irregularities only, since by its efforts a gang, alleged to be committing frauds by forging Railway Receipts, was unearthed.

51. Mela Traffic.—During the year under review, restrictions had again to be imposed on travel by rail to the more important *Melas* and Fairs through the issue of Prohibitory Orders by Provincial Governments under the Defence of India Rules at the request of Railway Administrations concerned.

Towards the latter half of the year, instructions were issued to Railways to review their available transport facilities and discontinue, where possible, the practice of asking for Prohibitory Orders, particularly in the case of the less important Fairs.

52. Measures to ensure civility and assistance on the part of Railway staff in their dealings with the public.—Throughout the year, this matter continued to engage the attention of Railways. In all cases in which the attention of Administrations was drawn, to specific complaints prompt action was taken against the staff at fault. Several Railways employed special staff at important stations to assist and guide passsengers, particularly those travelling third class.

53. Measures taken to prevent blackmarketing of tickets.—Railways introduced various measures to combat the blackmarketing of tickets. These included :—

(i) provision of additional booking office facilities;

(ii) arrangements to regulate the approach of passengers to booking office windows;

(iii) surprise checks by inspecting officials;

(iv) close scrutiny of applications for refunds on unused tickets;

(v) measures for the apprehension and prosecution of persons engaged in blackmarketing of tickets.

CHAPTER V

RAILWAY COLLIERIES

54. The output from the principal Railway Collieries during the year 1945-46 compares with the previous year's output as follows :—

Colliery.	Owned by	Output. 1944-45.	Output. 1945-46.
		Tons.	Tons.
1. Bhurkunda	B. A., E. I. & N. W. Railways	136,423	**172,145**
2. Kargali	G. I. P. Railway	524,864	**747,017**
3. Kurharbaree & Serampore	E. I. Railway	582,345	**601,155**
4. Joint Bokaro	E. I. & B. N. Railways	856,312	**1,159,570**
5. Joint Sawang	Do.	61,146	**66,587**
6. Jarangdih	B. B. & C. I. & M. & S. M. Railways	65,934	**58,368**
7. Talcher	M. & S. M. Railway	192,421	**194,505**
8. Kurasia	B. B. & C. I. Railway	290,119	**350,878**
9. Argada	B. N. Railway	162,997	**154,220**
10. Deulbera	Do.	73,738	**79,076**
	Total	2,946,299	**3,583,521**

55. Total Coal consumed by Railways.

	Tons.
Class I Railways—	
Indian Government Railways	10,004,984
Other Class I Railways	373,768
Class II Railways	192,932
Class III Railways	72,605
TOTAL	10,644,289

56. Coal mined in India.—In 1945 the coal mined in the various provinces of British India amounted to 26,255,210 tons as against 23,487,571 tons in 1944, an increase of 2,767,639 tons.

57. Coal despatched by Rail.—The quantities of coal carried by the East Indian and Bengal Nagpur Railways were as follows :—

	1944-45.	1945-46.
	Tons.	Tons.
East Indian Railway	14,237,774	**15,681,852**
Bengal Nagpur Railway	8,204,077	**8,616,360**
TOTAL	22,441,851	**24,298,212**

CHAPTER VI

ROLLING STOCK AND MATERIALS

58. **Additions to equipment.**—During the year, the following locomotives and rolling stock, including arrears brought forward from previous years, were on order for broad and metre gauge railways :—

Items.	Broad Gauge.	Metre Gauge.
Locomotives	944	*Nil*
Coaching Stock	1,105 Units	319 Units
Goods Stock	30,516 ,,	2,434 ,,

New locomotives and rolling stock actually placed on the line during the year as additions or in replacement were as under :—

Items.	Broad Gauge.	Metre Gauge.
Locomotives	441	*Nil*
Coaching Stock	94 Units	32 Units
Goods Stock	11,680 ,,	230 ,,

N.B.—(One Unit=one four-wheeler).

NOTE 1.—The above figures are exclusive of Mysore Railway from whom information was not received.

NOTE 2.—The metre gauge figures are exclusive of the War Department stock.

58.1. **Engines.**—In the previous Reports a comparison of the average tractive effort was being made taking together all types of locomotives (except electric locomotives). On that basis there was an increase on the broad gauge in the average tractive effort per engine from 26,667 lbs. in 1944-45 to 27,066 lbs. in 1945-46, but on the metre gauge it declined from 15,485 lbs. in 1944-45 to 15,262 lbs. in 1945-46. With the growing increase in the number of " non-steam " locomotives, detailed comparison under the following categories may be of greater interest :—

Average Tractive Effort per engine (in lbs.).

Type of Locomotives.	Broad Gauge.		Metre Gauge.	
	1944-45.	**1945-46.**	1944-45.	**1945-46.**
1. Steam (including Sentinel and Clayton types) . .	26,671	**27,071**	15,485	**15,262**
2. Diesel Electric	26,007	**26,041**	..	..
3. Electric	30,515	**30,515**	10,400	**10,400**

NOTE.—The decline in the average tractive effort per metre gauge locomotive during 1945-46 as compared with 1944-45 is due mainly to the inclusion of certain U.S.A. metre gauge locomotives during 1944-45, the allotment of which was subsequently cancelled.

59. **Manufacture of boilers and locomotives in India.**—Remodelling of the Locomotive Repair Shops at Kanchrapara for locomotive building referred to in paragraph 60 of the previous year's Report was based on the proposals to have the heavy repair work previously carried out at these works executed elsewhere. These proposals had to be reconsidered due to the unsatisfactory results obtained during the War when the heavy repair work previously executed in these Works was transferred to the two contiguous railways, in order to utilize the entire capacity of the Kanchrapara Locomotive Repair Workshops for munition work. The reconsideration was not completed at the end of the year.

In accordance with the agreement reached with Tatas, the Singhbhum Workshops of the East Indian Railway were handed over to them on the 1st June 1945 for the manufacture of boilers and for future development into a locomotive building works. The Singhbhum shops were engaged on the manufacture of 100 S.G.S. class boilers during the year.

The Ajmer Workshops of the Bombay, Baroda and Central India Railway continued to manufacture locomotives to a limited extent. Besides handing over to the Oudh Tirhut Railway the second YB metre gauge locomotive which was undergoing trials at the end of last year, the Ajmer Workshops completed the order for the first batch of 10 XT/1 class broad gauge locomotives for the North Western Railway. Work on the manufacture of the second batch of 10 XT/1 locomotives was put in hand.

60. Rationalization of workshop manufacturing capacity.—During the year under review twenty-six meetings of the Rationalization Committees were held. In addition to finding capacity for meeting Railways' immediate requirements of locomotive, carriage and wagon spare parts, these meetings are now at the instance of the Railway Board examining the question of manufacturing components in bulk for Railways within the group.

61. War Branch.—The War Branch in the Railway Board's Mechanical Directorate continued to deal with arrangements for the supply from Indian Railways of War Department requirements of locomotives and rolling stock for service in India and overseas.

62. Rolling Stock and Ambulance Trains.—With the cessation of hostilities, the work of construction of ambulance trains and special military cars in railway workshops was stopped. Most of the broad gauge and metre gauge ambulance trains were returned to railways for reconversion of stocks for civilian use.

63. Air-conditioning of coaching stock.—On release by the War Department, broad gauge and metre gauge air-conditioned ward cars will be converted to air-conditioned coaches for civilian traffic.

Air-conditioning equipment ordered by the War Department for ambulance trains has been taken over by Railways.

64. Supply of rails and fishplates from indigenous sources.—The restricted supplies of steel referred to in last year's Report continued during the year under review. The total tonnage of rails ordered by railways from the two steel companies (*viz.*, Messrs. The Tata Iron and Steel Company, Limited, and the Steel Corporation of Bengal Limited) for supply in 1945-46 amounted to 106,022 tons (including the carry-over of 2,175 tons of 1944-45 order) and the tonnage of fishplates ordered from Messrs. Tatas (Steel Corporation of Bengal do not roll fishplates) amounted to 4,696 tons. Orders could only be placed up to the limit authorized by the Iron and Steel Controller.

The actual quantity supplied against these orders in the year ending 31st March 1946, however, amounted to 73,275 tons of rails and 2,460 tons of fishplates only.

65. Wooden sleeper purchase organisation.—The total value of timber other than sleepers purchased by Class I Railways (excluding Bikaner, Jodhpur, Mysore State and His Exalted Highness the Nizam's State Railways) during the years commencing with 1941-42 was as follows :—

	Rs.		Rs.
1941-42 . .	38,54,000	1944-45 . .	46,69,000
1942-43 . .	28,31,000	**1945-46** . .	**54,72,000**
1943-44 . .	47,89,000		

The total purchase of wooden sleepers during the years commencing with 1941-42 has been,

Broad Gauge and Metre Gauge.

	Tons.		Tons.
1941-42 . . .	181,242	1944-45 . . .	115,000
1942-43 . . .	154,124	**1945-46** . . .	**116,200**
1943-44 . . .	146,062		

The relative position of various kinds of sleepers can be seen from the following percentages based on the total number of sleepers in the track of Class I Railways:—

Broad Gauge.

—	Wood.	Cast Iron.	Steel.	Others.
1941-42	40·2	43·1	16·44	0·26
1942-43	41·0	42·1	16·65	0·25
1943-44	41·0	42·19	16·55	0·26
1944-45	40·7	42·54	16·49	0·27
1945-46	**40·6**	**42·64**	**16·57**	**0·19**

Metre Gauge.

—	Wood.	Cast Iron.	Steel.	Others.
1941-42	69·66	5·31	21·53	3·50
1942-43	73·39	5·27	21·34	..
1943-44	73·70	5·21	21·03	0·06
1944-45	77·87	5·86	16·27	·007
1945-46	**78·00**	**6·00**	**16·00**	**·005**

The wooden sleeper track mileage of broad and metre gauges on Class I Railways on 31st March of each year was as follows:—

	Miles.		Miles.
1941-42	24,262	1944-45	25,197
1942-43	24,186	**1945-46**	**25,200**
1943-44	24,725		

No wooden sleepers were imported for use by Indian Railways. The average price of first class *sal* sleepers in the Eastern Group was as follows:—

Broad Gauge.

	Rs. A. P.		Rs. A. P.
1941-42	7 2 0	1944-45	8 11 0
1942-43	7 2 0	**1945-46**	**8 13 8**
1943-44	8 9 6		

Metre Gauge.

	Rs. A. P.		Rs. A. P.
1941-42	2 8 0	1944-45	3 10 0
1942-43	2 11 0	**1945-46**	**3 12 7**
1943-44	3 10 0		

At Dhilwan, on the North Western Railway, 3,12,896 soft wood sleepers of coniferous species were impregnated with a mixture of 40 per cent. creosote and 60 per cent. fuel oil during 1944-45 and 3,83,916 during 1945-46. Besides the broad gauge sleepers, a number of sleeper ends, narrow gauge sleepers and timber totalling approximately 80,000 c.ft. were also treated:—

—	Fir.	Chir.	Deodar.	Total.
1. Number of sleepers treated—				
1944-45	1,22,211	1,33,737	56,948	3,12,896
1945-46	**1,56,609**	**1,36,195**	**67,727**	**3,60,531**
2. Average absorption of creosote per sleepe (40% of Mixture).	6·1 (lbs.)	6·0 (lbs.)	4·2 (lbs.)	..
3. Average absorption of liquid fuel oil (60% of Mixture).	9·2 (lbs.)	9·1 (lbs.)	6·28 (lbs.)	..
4. Average total absorption per sleeper	15·3 (lbs.)	15·1 (lbs.)	10·48 (lbs.)	..

The cost of treated sleepers was as follows :—

—	1941-42.	1942-43.	1943-44.	1944-45.	**1945-46.**
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	**Rs. A. P.**
Fir	4 0 0	4 2 0	4 5 0	6 7 5	**6 3 11**
Chir	4 15 0	4 14 0	6 5 0	7 4 3	**7 3 1**
Deodar	5 14 0	5 14 0	6 3 0	8 10 3	**8 7 4**

The total amount spent on wooden sleepers on Class I Railways (excluding the Bikaner, Jodhpur, Mysore and His Exalted Highness the Nizam's State Railways) was each year as follows :—

(In thousands of rupees.)

	Rs.		Rs.
1941-42 . . .	96,56	1944-45 . . .	1,84,22
1942-43 . . .	99,25	**1945-46 . . .**	**1,66,01**
1943-44 . . .	1,00,68		

NOTE.—The difference from the corresponding figures for 1945-46 appearing in Appendix " A " page 243 of Volume II of this Report, is due to one railway having furnished revised figures after the printing of that Volume, which have been, duly included herein.

66. Value of Railway material purchased.—The value of stores purchased by Indian Government Railways increased from Rs. 45·42 crores in 1944-45 to Rs. 80·80 crores in 1945-46. The value of " indigenous materials " purchased went up by Rs. 32,12 lakhs and that of " imported materials " also increased by Rs. 3,26 lakhs. The increase was particularly heavy under permanent-way material and track tools (Rs. 1,31 lakhs), rolling stock (Rs. 4,13 lakhs) and miscellaneous stores grouped in the statement below as " all other stores " (Rs. 29,57 lakhs). A summary of the value of the stores purchased is given below. The detailed figures are given in Appendix A, pages 240-243 of Volume II of this Report :—

Particulars.	Value of imported materials (in lakhs).			Value of indigenous materials (In lakhs).	Total purchases (in lakhs).	
	Purchased direct.	Purchased through agents in India.	Total imported materials.		**1945-46**	1944-45
	Rs.	Rs.	Rs.	Rs.	**Rs.**	Rs.
A.—Bridge work and its parts, fittings and special fastenings . .	..	..	..	3	**3**	7
B.—Engineering plant and components including all hand and power machinery	1	7	8	5	**13**	24
C.—Workshop machinery, plant and equipment including pneumatic machinery and tools . . .	6	38	44	18	**62**	46
D.—Permanent-way material and track tools	1,23	48	1,71	5,47	**7,18**	5,87
E.—Rolling Stock	2,38	7,87	10,25	5,33	**15,58**	11,45
F.—Building material, water mains, sewage system and track and yard enclosing material and signal and interlocking material, etc.	1	19	20	98	**1,18**	1,03
G.—Stores hardware, copper, tin and zincware, all leather, canvas and india-rubber in bulk, metals, painters' stores, timber and fuel and fuel oil, etc.	6	1,39	1,45	14,95	**16,40**	16,28
H.—Electrical and train and locomotive lighting plants and materials, etc., and telegraph and telephone equipment	12	48	60	47	**1,07**	98
All other stores	11	1,27	1,38	37,23	**38,61**	9,04
Total . .	3,98	12,13	16,11	64,69	**80,80**	45,42

NOTE.—See note under para. 65, page 40.

67. In-take of indigenous goods.—The comparative figures for total purchases for the years 1944-45 and 1945-46 in respect of all Indian Government Railways are given below. These include purchases made through the Industries and Supply Department and other Government agencies.

The increase in the total value of stores purchases was mainly due to inclusion of cost of foodgrains and groceries, etc., purchased for grain and grocery shops (amounting to Rs. 31,26·55 lakhs) in the figures for 1945-46.

(In lakhs of rupees.)

Year.	Total value of purchases.				
	Stores imported direct.	Imported Stores purchased in India.	Stores of Indian manufacture or indigenous origin.	Total value of Imported and Indigenous Stores.	Percentage of Col. 4 to Col. 5.
(1)	(2)	(3)	(4)	(5)	(6)
1944-45	3,64·61	9,19·99	32,56·99	45,41·59	71·7
1945-46	**3,97·64**	**12,13·42**	**64,68·83**	**80,79·89**	**80·0**

NOTE.—See note under para. 65, page 40.

68. Value of stores purchased through the Industries and Supply Department.—The comparative figures for 1944-45 and 1945-46 are given below:—

(In lakhs of rupees.)

Year.	Total value of stores purchased.	Value of stores purchased through the Industries & Supply Department.	
		Amount.	Percentage of Col. 3 to Col. 2.
(1)	(2)	(3)	(4)
1944-45	45,41·59	6,39·69	14·1
1945-46	**80,79·89**	**7,91·88**	**9·8**

NOTE.—See note under para. 65, page 40.

69. Value of stores purchases controlled by the Railway Board.—As in previous years, the Railway Board, continued to purchase rails, sleepers (steel, cast iron and wood) and wagons for all Indian Government Railways. Figures for 1944-45 and 1945-46 in respect of purchases made by the Railway Board of these items are given below:—

(In lakhs of rupees.)

Year.	Total value of stores purchased.	Value of stores purchases controlled by the Railway Board.	
		Amount.	Percentage of the total value of stores purchased.
(1)	(2)	(3)	(4)
1944-45	45,41·59	8,65·51	19·1
1945-46	**80,79·89**	**14,18·49**	**17·5**

NOTE.—See note under para. 65, page 40.

70. Value of Lease/Lend purchases controlled by the Railway Board.—The total debits raised by the Deputy Chief Accounts Officer, American Purchases, New Delhi, against Railways in the year, 1945-46 for the Lease/Lend Stores controlled by the Railway Board amounted to Rs. 5,10,41,878.

71. Direct purchases by Railways.—The value of direct purchases made by Railways during 1945-46 amounted to Rs. 58,70 lakhs as compared with Rs. 30,36 lakhs during 1944-45.

NOTE.—See note under para. 65, page 40.

72. Stores balances.—The statement below compares the total stores balances at the end of 1945-46 with those at the end of 1944-45 :—

(In lakhs of rupees.)

Year.	B. A.	B. N.	B., B. & C. I.	E. I.	G. I. P.	M. & S. M.	N. W.		O. T.	S. I.	Other Rlys.	Total.
							Commercial.	Strategic.				
1944-45	3,67	3,01	2,12	3,56	3,89	1,05	3,25	28	76	1,68	61	23,88
1945-46	**4,89**	**3,39**	**2,32**	**4,01**	**4,76**	**98**	**3,40**	**28**	**70**	**1,52**	**71**	**26,96**

73. Engine headlights situation.—The generating plants are high precision products of a proprietory nature which, together with the necessary spares such as ball-races, turbine rotors, etc., have to be imported as no satisfactory substitutes are available from indigenous sources. Production in the United States of America and the United Kingdom is such that the availabilities for export to India and elsewhere are extremely limited. With such spares as can be obtained railways are managing to carry on with some difficulty. They have, therefore, been instructed to observe special care in maintenance, with the object of conserving all spares and keeping ali engine headlights plant in efficient service as long as possible. Pressure is also being maintained on the Industries and Supply Department to lose no opportunity of obtaining import of these important articles of equipment.

74. Timber supply situation.—Due to the considerable decrease in the requirements of timber for Defence Services, consequent on the termination of hostilities, the supply of timber to Class I Railways (except Mysore State Railway) remained satisfactory throughout the year as is shown in the statement below :—

(Figures in tons.)

Year.	Quantity demanded by the Railways.	Quantity allocated to the Railways.	Quantity actually received by Railways.
II Quarter of 1945	11,500	7,420	7,534
III Quarter of 1945	11,500	7,970	8,768
IV Quarter of 1945	11,500	17,950	8,634
I Quarter of 1946	15,000	14,738	18,268
TOTAL .	49,500	48,078	43,204

At the end of the year the working stocks of Class I Railways (except Mysore State Railway) totalled 27,493 tons.

75. Train lighting lamp situation.—Owing to the high incidence of theft and vandalism and the dearth of supplies from lamp manufacturers in India, the United Kingdom and the United States of America, their manufacturing capacity being engaged with heavy demands for standard types of lamps, railways experienced a serious shortage of train lighting lamps during the last two years of hostilities.

With the cessation of hostilities, however, the situation has slightly eased, though supplies are as yet far from satisfactory. Production from indigenous sources has shown an improvement and limited supplies have also been forthcoming from both the United Kingdom and the United States of America, but even so railways' requirements for the year 1945 were not fully complied with till during the earlier months of 1946.

With the anticipated resumption of normal conditions in the country, indigenous production is expected to increase and although theoretical

capacity exists from these sources, it has yet to be seen that such supplies can be entirely relied upon to meet railways' demands in full within a certain definite period. In the meantime every effort is being made by railways to revert to pre-war standards of train lighting in their Mail and Passenger Services but this cannot be achieved until a reasonable working reserve stock can be secured.

76. Supply situation of other vital stores or components of first importance.

Indigenous Stores—Linseed oil.—Railways have been experiencing difficulties in obtaining linseed oil due to the non-availability of the seed to the oil industry at controlled rates and the restriction of movement of seeds as imposed by the Provincial authorities. The Food Department have formulated a plan for complete control of linseed in India and with the introduction of control it is hoped that the position will become easier.

Imported Stores.—Due to the cessation of hostilities and as a result of the efforts made by the Hydari Mission in 1945, the supply position of the Imported stores *ex*-United Kingdom improved appreciably in the year under review. But owing to the labour troubles in that country, the position did not improve to the extent it was expected.

The following were the main items that were outstanding at the end of 1945-46 against the Controller of Imported Railway Stores 1944 and 1945 indents:—

No.	1944 Indents.	1945 Indents.
1	Copper Boiler Plates (Flanged).	Copper Boiler Plates (Flanged).
2	Boiler Tubes.	Boiler Tubes.
3	...	Screw Couplings.
4	...	Wheels, Axles & Tyres (Assembled).
5	Axles.	Axles.
6	Tyres and Steel Loco. and C. W. Tyres.	Tyres and Steel Loco. and C. W. Tyres.
7	...	Special Electric Lamps.
8	...	Loco. Headlight Bulbs.
9	Chains.	Chains.
10	...	Cranes (CIRS/53/45).

About 38 items against Bengal Assam Railway's BARWO and BAR/Doubling indents also remained outstanding at the end of the year and the question of whether they should be cancelled or if they could be accepted for use on the open line works of the Bengal Assam Railway was under the consideration of the Board. Moreover, there were about 24 items outstanding against the pre-Controller of Imported Railway Stores Indents.

Supplies of stores to railways *ex*-United States of America were satisfactory.

Deliveries to Railways *ex*-Australia against Controller of Imported Railway Stores 1944-45 Indents were unsatisfactory during the year under review.

77. Situation regarding theft of Railway property—carriage fittings, etc.—Reports regarding thefts of stores from stores depôts and fittings from coaching stock continued to be received during the year in spite of far reaching measures already in force, including improved lighting arrangements in yards and depôts, improved fencing and strengthening of Watch and Ward staff. In an endeavour to impose a further check on such

thefts, Railways have been requested to tighten up the measures already in force and to continue to explore every avenue to arrest the incidence of these thefts.

78. Efforts to obtain fuel economy.—The Railway Fuel Economy Campaign was continued vigorously throughout the year under review and, as the cessation of hostilities brought no immediate prospect of any improvement in the world coal situation into view, railway administrations were instructed to resist all tendencies towards any relaxation of efforts which might become apparent.

The supply of a greater proportion of inferior qualities and unfamiliar varieties of coal has, however, resulted in a small percentage of increase in the general railway consumption over the year. This prevents the full effects of the campaign from being appreciated without a detailed study of the separate fuel economy activities of each railway. Such a study, however, affords convincing evidence that the increase in consumption would have been greatly exceeded had it not been for the tight control established and the various fuel economy measures which are now in force.

Central Standards Office for Railways.

79. Civil Engineering Branch.—During the year under review, the more important works completed by the Civil Engineering Branch included :—

(a) *for military requirements.*—Issue of Statement O.D.C. II dealing with the movement of mechanical transport vehicles and other over-dimensional consignments by rail and further investigation into the transport of such consignments by rail.

(b) *standard and tentative designs* issued included—

(i) 6 feet wide rigid frame type foot over bridges over two and three tracks broad gauge and metre gauge,

(ii) 40 feet span goods-shed, riveted type,

(iii) high tensile steel plate girders 100 feet, 80 feet, 60 feet and 40 feet broad gauge spans and mild steel welded type 60 feet and 40 feet broad gauge spans,

(iv) 1 in 16 high speed turnouts with curved switches, broad gauge 90 R steel sleepers,

(v) 1 in 8½ scissors crossovers for 14′-0″ and 12′-6″ track centres metre gauge 60 R.

(vi) Dogspikes, revised sizes for use with and without bearing plates.

(c) A draft Code of Practice for combined rail-road bridges was prepared and is being issued as a Provisional Code forming Appendix to Item 13 (*a*) of the 26th Bridge Standards Committee Report.

80. Mechanical Engineering Branch.—During the year under review the more important drawing and design work undertaken included—

Carriage and Wagon—

(1) Proposed layouts of post-war lower class coaches.

(2) Proposed arrangement and details of berths in three tiers for lower class coaches to provide additional sleeping accommodation.

(3) Improved ventilation in luggage compartments of coaching stock brake vans.

(4) Substitution of steel for timber in the bodies of U.S.A.-built broad gauge high sided gondolas.

(5) Conversion of BWX type well wagons for the carriage of "Alligator" type tanks.

(6) Lashing arrangement for "BR" and "BWL" type wagons utilising wire rope in lieu of chain as an emergency measure.

(7) Proposed design of light weight broad gauge carriage bogie.

(8) Standardization of rolling tolerances on locomotive and carriage and wagon wheel tyres.

Locomotive—

(9) Standardization of journal sizes and centres for broad and metre gauge locomotives coupled wheels with continuous pattern horn blocks and standard widths of overhung bearing springs.

(10) Improved design of intermediate drawgear for broad gauge locomotives.

General—

(11) Trip mechanism for Gravity Test Plant trolley.

(12) Chart for grinding wheels and segments.

(13) The normal work of the Mechanical Drawing Office in keeping standard drawings of rolling stock up to date continued as far as the demands for work of higher priority permitted.

Imported Locomotives and Wagons.—The index of modifications required to be carried out to the imported locomotives and wagons *ex*-United States of America and Canada has been maintained up to date.

Capacity of broad and metre gauge Locomotive Tenders.—A range of designs of broad and metre gauge locomotive tenders together with proposals received from Railways were considered by the Locomotive Standards Committee. For metre gauge (i) 10 tons coal and 3,000 gallons of water carried on an 8-wheeled tender with maximum axle load of 10 tons, and (ii) $6\frac{1}{2}$ tons coal and 2,000 gallons of water carried on a 6-wheeled tender with maximum axle load of 9 tons have been finalized as future metre gauge standards.

Design for broad gauge tenders are under investigation.

Lateral control of Indian Railway Standard "Pacific" Type Locomotives.—As a result of flange force trials on "X" class "Pacific" locomotives, it has been established that the provision of a spring control to the hind truck is successful in relieving flange forces at the trailing coupled wheels which on certain types of tracks have been found to be undesirably high. Consequently it was decided that a robust type of spring control to the hind trucks of all "XB" and "XC" locomotives must be provided.

The Consulting Engineers were, therefore, requested to undertake in their office a detailed investigation in collaboration with the roller bearing manufacturers of the proposed application of spring control and for detail drawings of the new material and method of application to be prepared.

The report on this investigation has been received and is under examination.

Schedule of Limits and Fits for Indian Railway Standard Locomotives.—The Indian Railway Standard schedule of Limits and Fits for locomotives was last revised in 1931. In May 1945 Messrs. Rendel, Palmer and Tritton were requested to advise if their experience with the number of locomotives built for India under their inspection since that date has indicated the necessity for any fresh revisions from the contractors' point of view and if so what alterations could be recommended by them for the schedule.

The necessary additions and modifications to the existing list of Limits and Fits have been received from the Consulting Engineers and revised schedule circulated to Railways, etc.

81. Specifications Branch.

Specifications.—The normal work of this Branch in keeping Indian Railway Standard Specifications up to date continued throughout this year.

During the year under review no new Indian Railway Standard Specifications were issued. Ten Indian Railway Standard Specifications were revised.

Five new and eight revised Indian Stores Department specifications were adopted for use on Railways.

As an emergency war measure and with a view to encouraging indigenous manufacture, certain provisions in nine Indian Railway Standard Specifications were relaxed.

Particular specifications for broad gauge and metre gauge coaching underframes for 1946-47 programme and for "CR" and "O" types of wagons against Railway Board's call for 1946-47 were prepared and orders were placed in India.

Specifications are regularly received from Standards Institutions, Australia, Newzealand and from the American Society for Testing Materials in the United States in addition to the regular receipt of specifications from the British Standards Institute. These specifications are reviewed and recorded for reference purposes.

The paint and steel exposure and corrosion test panels were inspected regularly throughout the year and reports submitted to the Government Test House, Alipore. The tests continue.

Reclamation Bulletin.—Reclamation Bulletin No. 1 was issued during the year 1944-45 and details of further reclamation methods adopted on railways were collected and prepared in proof form and submitted to the press for printing. Proofs are still awaited.

Boiler Welding Code of Practice.—A boiler welding Code of Practice was drawn up during the year and it is hoped that this will be issued during the year 1946-47.

Library.—The Central Standards Office library in Simla contains over 1,000 technical books and about 600 catalogues and during the year over 30 books have been added to the library. This office has joined the following Institutions and Associations and is now in regular receipt of their publications :—

1. Association of American Railroads.
2. American Society for Testing Materials.
3. Institute of Welding—as Industrial Corporate Member Class II.
4. British Cast Iron Research Association.
5. British non-ferrous Research Association.

The card-index record of trials and patents has been maintained throughout the year.

82. Standardization Committees.—The Bridge Standards Committee met once during the year. The Signalling and Interlocking and Track Standards Committees did not meet during the year.

Locomotive Standards Committee.—The Locomotive Standards Committee met in November 1945 and dealt with points which had arisen in the period since February 1942 (the date their annual meetings were suspended and revived with effect from 1945) on the different features relating to the locomotive design and fittings. Among the subjects on which recommendations were made were :—

1. Design of fire grates.
2. Design of crosshead detachable arm.
3. Design of fire shovel.
4. Design features and fittings of the United States of America and Canada-built locomotives with a view to their adoption as Indian Railway Standards.

5. Modifications to " W " Series and " XP " type locomotives with a view to improve their performance and maintenance.
6. Consideration of design of roller bearings for application to locomotive coupling and connecting rods.
7. Revised design of intermediate drawgear.
8. Results of trials of experimental fittings were considered and fifteen trials were closed. In four instances, fittings that had been under trial were considered satisfactory and out of these one was adopted as Standard.

Carriage and Wagon Standards Committee.—A meeting of the Carriage and Wagon Standards Committee was held in February 1946 when results of trials of experimental fittings were considered. The following are amongst other important subjects dealt with :—

1. Design of post-war Coaching Stock—light weight stock with improved amenities.
2. Investigation into the possibilities of use of plywood for railway coaching stock.
3. Improved design of window catch for railway carriages.
4. Review of Indian Railway Standard fittings found to be responsible for heavy maintenance.
5. Design features of the United States of America and Canada-built wagons for adoption as Indian Railway Standards.
6. Revised design of tank wagons.
7. Design of weather-proof doors for wagons
8. Post-war design of covered wagons.

The Electrical Standards Committee and Standing Committee on Standards and Specifications for Indian Railways did not meet during the year under review.

83. Research and Development Branch.

Mechanical Section.—During the period under review full scale Rating and Performance trials with the WL class locomotives, which were commenced during the previous period, were completed. Data relating to trials with the AWE, XE and WL class boilers was compiled, analysed and studied in the light of earlier analyses of D/4M and HGc class boiler performances in order to determine suitable proportions for future Indian locomotive boilers. Experiments were undertaken with different designs of fire shovel on two broad gauge railways with a view to standardization. The dynamometer car staff was called upon to make calculations on references from Railways, such as in connection with new problems in the use of low grade fuels and their effects on the power rating of locomotives and the design of renewal boilers.

Data submitted in replies from Railways to a questionnaire from this office regarding loads and speeds for post-war passenger services were classified to serve as a basis for the design of a new standard passenger locomotive. Outline designs for a locomotive with a 20-ton axle-load have been made and tentative time tables have been prepared. The axle-load of the new locomotive was subsequently restricted to 18 tons; and preliminary work for this new locomotive was in hand.

Civil Section.—During the period under review arrangements were being made to re-open this section which was closed in February 1942.

Metallurgical and Chemical Section.—The Central Standards Office following up data received from the British Cast Iron Research Association on the " Standardized Tests and Test Equipment for Moulding Sands ", referred the matter to the Metallurgists and Chemists Sub-Committee of the Mechanical Section of the Indian Railway Conference Association who

recommended purchase of British Cast Iron Research Association and American Foundrymen's Association testing apparatus by Indian Railways for carrying out practical tests in this country.

Advice from the British Cast Iron Research Association was also sought and received on the following subjects :—

(i) Indian Railway Cupola Practice.

(ii) Modification of existing cupolas with Railway Administration.

(iii) Specification for a modern cupola.

Experimental work on the following subjects commenced in the previous year was completed :—

(i) Dephosphorization of steel castings.

(ii) Development of silico-copper bronze.

A little progress was made with investigation into the production of high duty cast iron and research on " Inherent Grain Size Control " initiated during the previous period was continued.

The Council of Scientific and Industrial Research entrusted this office with experimental work on " Sprayed Metal Bearings ". The matter was referred to the Metallurgists and Chemists Sub-Committee of the Mechanical Section, Indian Railway Conference Association for advice on the nature and extent of the research work to be undertaken by Railways, and a reply was still awaited at the end of the period under review.

The Central Standards Office was represented as usual on the Metallurgists and Chemists Sub-Committee of the Indian Railway Conference Association.

CHAPTER VII

STAFF

84. Number of Staff.—The total number of employees (permanent and temporary) on all Indian Railways and in the office of the Railway Board and other offices subordinate thereto (excluding staff employed on construction) at the end of the year 1945-46 was 990,869 as compared with 964,519 at the end of 1944-45. The total route mileage at the end of the year was 40,518. The following table shows the number of employees by communities on the 31st March 1945 and 1946. A similar statement showing details by railways is given as Appendix C-I, pages 246-247, of Volume II of this Report:—

Date.	Europeans.	Indians.									Grand Total.
		Hindus.		Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	Total.	
		Hindus, other than Scheduled Castes.	Scheduled Castes.								
31st March 1945	1,633	536,146	144,664	232,108	12,248	9,983	23,513	1,615	2,609	962,886	964,519
31st March 1946	**1,516**	**548,814**	**155,750**	**234,949**	**12,151**	**9,958**	**23,979**	**1,566**	**2,186**	**989,353**	**990,869**

NOTE.—These figures exclude staff on loan from the Indian Audit and Accounts Service.

* Revised figures due to changes made by the Railway Administrations in the figures published last year.

85. Cost of Staff.—The following statement shows the number and cost of all staff, gazetted and non-gazetted, permanent and temporary, open line and construction, employed on Class I Railways during the years 1944-45 and 1945-46. Contractors' labour is not included:—

Railway System.	Year.	Number of staff on 31st March.							† Cost of staff during the year ending 31st March.			
		Open line.			Construction.			Gazetted Officers on loan from the Indian Audit and Accounts Service.	Gazetted Officers.	Non-gazetted employees.	Total.	Total including staff on loan from the Indian Audit and Accounts Service.
		Gazetted Officers.	Non-gazetted employees.	Total.	Gazetted Officers.	Non-gazetted employees.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12	13
									Rs.	Rs.	Rs.	Rs.
Bengal Assam .	1945	206	146,740	146,946	..	..	..	..	40,28,790	6,68,42,228	7,08,71,018	7,09,03,804
	1946	**199**	**140,760**	**140,959**	..	..	..	..	**45,85,731**	**8,17,95,462**	**8,63,81,193**	**8,63,81,193**
Bikaner State .	1945	19	4,199	4,218	..	..	..	..	1,91,320	14,07,468	15,98,788	15,98,788
	1946	**19**	**5,058**	**5,077**	..	..	..	..	**1,81,920**	**18,01,680**	**19,83,600**	**19,83,600**
Bengal Nagpur .	1945	194	90,503	90,697	..	..	..	..	26,54,947	5,72,29,003	5,98,83,950	5,98,83,950
	1946	**211**	**93,905**	**94,116**	**10**	**360**	**370**	..	**37,93,713**	**6,24,86,398**	**6,62,80,111**	**6,62,80,111**
Bombay, Baroda and Central India	1945	186	79,085	79,271	..	2	2	..	30,66,689	5,64,32,381	5,94,99,070	5,94,99,070
	1946	**180**	**81,664**	**81,844**	..	**1**	**1**	..	**35,17,211**	**6,24,78,929**	**6,59,96,140**	**6,59,96,140**
East Indian .	1945	270*	155,904*	156,174*	14*	8,560*	8,574*	3	58,42,514	9,87,48,702	10,45,91,216	10,47,03,240
	1946	**278**	**164,775**	**165,053**	**20**	**6,354**	**6,374**	**2**	**64,26,002**	**10,71,35,105**	**11,35,61,107**	**11,36,16,463**
Great Indian Peninsula.	1945	216	135,194	135,410	..	..	..	..	41,53,822	7,45,30,516	7,86,84,338	7,86,84,338
	1946	**215**	**146,508**	**146,723**	..	..	..	..	**50,26,146**	**8,31,99,855**	**8,82,26,001**	**8,82,26,001**

Railway System.	Year.	Number of staff on 31st March. Open line. Gazetted Officers.	Open line. Non-gazetted employees.	Open line. Total.	Construction. Gazetted Officers.	Construction. Non-gazetted employees.	Construction. Total.	Gazetted Officers on loan from the Indian Audit and Accounts Service.	† Cost of staff during the year ending 31st March. Gazetted Officers.	Non-gazetted employees.	Total.	Total including staff on loan from the Indian Audit and Accounts Service.
1	2	3	4	5	6	7	8	9	10	11	12	13
									Rs.	Rs.	Rs.	Rs.
Jodhpur	1945	37	8,302*	8,339*	..	..	..	1	4,11,437	40,59,237	44,70,674	44,92,082
	1946	**46**	**8,945**	**8,991**	..	..	..	**1**	**4,55,959**	**51,77,627**	**56,33,586**	**56,58,294**
Madras and Southern Mahratta.	1945	155	64,496	64,651	..	..	..	..	25,60,639	3,74,43,337	4,00,03,976	4,00,03,976
	1946	**169**	**65,268**	**65,437**	..	..	..	..	**30,91,728**	**4,05,80,124**	**4,36,71,852**	**4,36,71,852**
Mysore State	1945	42	8,289	8,331	..	..	..	..	2,43,143	34,14,331	36,57,474	36,57,474
	1946	**44**	**8,611**	**8,655**	**1**	**3**	**4**	..	**2,52,484**	**32,41,848**	**34,94,332**	**34,94,332**
Nizam's State	1945	74	16,879	16,953	..	8	8	..	9,56,952	90,64,007	1,00,20,959	1,00,20,959
	1946	**75**	**17,037**	**17,112**	**3**	**286**	**289**	..	**10,88,278**	**1,00,43,196**	**1,11,31,474**	**1,11,31,474**
North Western	1945	255*	128,806*	129,061*	..	..	..	5	44,54,959	8,21,99,067	8,66,54,026	8,67,39,771
	1946	**238**	**134,117**	**134,355**	**14**	**379**	**393**	**3**	**48,58,566**	**9,36,77,041**	**9,85,35,607**	**9,86,04,060**
Oudh Tirhut	1945	101	40,576	40,677	..	..	..	..	13,77,158	1,56,02,202	1,69,79,360	1,69,79,360
	1946	**112**	**41,556**	**41,668**	..	..	..	..	**13,43,230**	**1,91,83,763**	**2,05,26,993**	**2,05,26,993**
South Indian	1945	137	48,423	48,560	..	..	..	..	18,94,358	2,78,59,887	2,97,54,245	2,97,54,245
	1946	**147**	**48,442**	**48,589**	..	..	..	..	**22,58,858**	**2,99,99,939**	**3,22,58,797**	**3,22,58,797**
Railway Clearing Accounts Office	1945	7	2,398	2,405	..	..	..	2	97,428	24,11,521	25,08,949	25,45,531
	1946	**5**	**2,308**	**2,313**	..	..	..	**2**	**69,099**	**29,44,171**	**30,13,270**	**30,54,633**
TOTAL	1945	1,899*	929,794*	931,693*	14*	8,570*	8,584*	11	3,19,34,156	53,72,43,887	56,91,78,043	56,94,66,588
	1946	**1,938**	**958,954**	**960,892**	**48**	**7,383**	**7,431**	**8**	**3,69,48,925**	**60,37,45,138**	**64,06,94,063**	**64,08,83,943**

* Represents revised figures for 1944-45 due to changes made by the Railway Administrations in the figures published last year.

† The figures of cost represent pay, allowances, passages, provident fund contribution and gratuity.

A comparison of the figures for 1945-46 with those for the previous year shows that the total number of staff employed on the open line of Indian Government Railways increased by 29,199 during the year, while the number of construction staff decreased by 1,153.

The total cost of staff including that of staff on loan from the Indian Audit and Accounts service increased by Rs. 7,14,17,355 during the year. Increases were recorded both in the numbers and cost of staff on Indian Government Railways. The general increase in numbers was due to employment of additional staff to cope with the increased traffic and on certain items of the post-war programmes and the rise in cost was due to the grant of enhanced rates of dearness allowance.

86. Indianisation.—**Indian Government Railways**—(i) *Direct Recruitment.*—*Superior Services.*—81 appointments were made to the Superior Railway Services by direct recruitment. Details are given below:—

Department.	Number of vacancies actually filled.	Vacancies filled by: Europeans.	Indians: Hindus: Hindus, other than Scheduled castes.	Scheduled castes.	Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Total.
1	2	3	4	5	6	7	8	9	10	11
Engineering	32	..	21	..	4	..	..	6	1	32
Accounts	2	..	1	..	1	..	..	..	..	2
Transportation (Traffic and Commercial).	33	..	20	..	9	1	1	2	..	33
Transportation (Power) and Mechanical Engineering.	7	..	5	..	2	..	..	..	..	7
Other Departments	7	..	5	..	1	1	..	..	..	7
TOTAL	81	..	52	..	17	2	1	8	1	81

The non-recruitment of Europeans was due to the suspension of recruitment in the United Kingdom for the duration of the War.

The shortage of Muslim recruitment was due to the requisite number of qualified Muslim candidates not forthcoming for appointment in the Engineering Department.

The deficiency in recruitment of Scheduled Castes was due to the fact that no qualified candidate of these castes was available for appointment to the Superior Railway Services.

The over-all direct recruitment to Superior Railway Services on the Indian Government Railways, taken together gives percentages as follows:—

	Per cent.
Hindus — Other than Scheduled Castes	64·2
Hindus — Scheduled Castes	...
Muslims	21·0
Anglo-Indians and Domiciled Europeans	2·5
Sikhs	1·2
Indian Christians	9·9
Parsis	1·2

(ii) *Promotions.*

(*a*) *Superior Services.*—Nineteen Lower-Gazetted Service Officers and Subordinates were promoted to the Superior Services during the year; of these ten were Hindus, one Muslim, and eight Anglo-Indians or Domiciled Europeans.

(*b*) *Lower Gazetted Service.*—Twenty-six promotions were made to the Lower Gazetted Service in the various Departments. Of these seven were Europeans and nineteen Indians. Of the latter, seven were Hindus, two Muslims, nine Anglo-Indians or Domiciled Europeans, and one Parsi.

87. Review of the progress made since 1934.—The statements on the following pages will throw further light on the progress made in Indianisation and in the recruitment of the various communities on Indian Government Railways since 1934, as reflected in the relative strength of Europeans and Indians belonging to the various communities. Part I relates to superior staff and Part II, to subordinate staff on scales of pay rising to Rs. 250 and over if they are on the old scales of pay, and of subordinates on scale of pay rising to Rs. 200 per mensem and over if they are on the new scales of pay.

PART I.

Statement of gazetted officers (both Superior and Lower Gazetted Service) on Indian Government Railways (permanent and temporary) on the 31st March 1934, 31st March 1945 and 31st March 1946.

31st March 1934.

Name of Railway.	Europeans.	Indians. Hindus. Hindus, other than Scheduled castes.	Indians. Hindus. Scheduled castes.	Indians. Muslims.	Indians. Anglo-Indians and Domiciled Europeans.	Indians. Sikhs.	Indians. Indian Christians.	Indians. Parsis.†	Indians. Other communities.†	Indians. Total.	Total number on the Railway (column 2 plus 11).
1	2	3	4	5	6	7	8	9	10	11	12
Indian Government Railways.											
Bengal Assam	95	57	..	11	18	3	3	..	1	93	188
Bengal Nagpur	125	42	..	7	14	2	1	..	2	68	193
Bombay, Baroda and Central India	123	32	..	3	2	1	3	..	7	48	171
East Indian	174	78	..	14	34	3	2	..	2	133	307
Great Indian Peninsula	145	35	..	11	9	..	7	..	6	68	213
Madras and Southern Mahratta	96	27	..	..	6	2	3	..	5	43	139
North Western	136	80	..	22	14	10	5	..	..	131	267
Oudh Tirhut	69	9	..	7	2	..	..	..	..	18	87
South Indian	73	45	..	1	9	..	1	..	..	56	129
Railway Board and miscellaneous offices.	38	10	..	6	6	..	1	..	1	24	62
TOTAL	1,074	415	..	82	114	21	26	..	24	682	1,756

31st March 1945.

Name of Railway.	Europeans.	Indians. Hindus. Hindus, other than Scheduled castes.	Indians. Hindus. Scheduled castes.	Indians. Muslims.	Indians. Anglo-Indians and Domiciled Europeans.	Indians. Sikhs.	Indians. Indian Christians.	Indians. Parsis.	Indians. Other communities.	Indians. Total.	Total number on the Railway (column 13 plus 22).
1	13	14	15	16	17	18	19	20	21	22	23
Indian Government Railways.											
Bengal Assam	64	92	..	16	24	3	5	2	..	142	206
Bengal Nagpur	65	71	..	14	39	4	..	1	..	129	194
Bombay, Baroda and Central India	74	58	..	20	12	1	5	16	..	112	186
East Indian	71*	136*	..	28*	36	5	5*	3	..	213*	284*
Great Indian Peninsula	82	66	..	17	21	3	16	9	2	134	216
Madras and Southern Mahratta	60	65	..	8	6	2	8	6	..	95	155
North Western	63	97*	..	47*	26	15	5	1	1	192*	255*
Oudh Tirhut	44	23	..	19	10	4	1	..	..	57	101
South Indian	40	72	1	8	8	1	7	..	..	97	137
Railway Board and miscellaneous offices.	24	34*	1	9*	9	4*	2	1	..	60*	84*
TOTAL	587*	714*	2	186*	191	42*	54*	39	3	1,231*	1,818*

31st March 1946.

Name of Railway.	Europeans.	Indians. Hindus. Hindus, other than Scheduled castes.	Indians. Hindus. Scheduled castes.	Indians. Muslims.	Indians. Anglo-Indians and Domiciled Europeans.	Indians. Sikhs.	Indians. Indian Christians.	Indians. Parsis.	Indians. Other communities.	Indians. Total.	Total number on the Railway (column 24 plus 33).
1	24	25	26	27	28	29	30	31	32	33	34
Indian Government Railways.											
Bengal Assam	53	97	..	20	20	3	5	1	..	146	199
Bengal Nagpur	67	82	..	20	45	5	..	2	..	154	221
Bombay, Baroda and Central India	72	58	..	22	10	1	5	12	..	108	180
East Indian	64	154	..	30	41	4	3	2	..	234	298
Great Indian Peninsula	70	75	..	17	22	1	18	11	1	145	215
Madras and Southern Mahratta	57	75	..	10	10	2	9	6	..	112	169
North Western	64	96	..	48	22	15	5	1	1	188	252
Oudh Tirhut	43	27	..	22	14	4	2	..	..	69	112
South Indian	41	76	1	9	10	1	9	..	..	106	147
Railway Board and miscellaneous offices.	20	29	..	11	10	4	2	1	..	57	77
TOTAL	551	769	1	209	204	40	58	36	2	1,319	1,870

Statement showing the percentages of the relative strength of Europeans and Indians of various communities.

		1934.	1945.	1946.
Europeans		61·16	32·29*	**29·47**
Indians	Hindus — Other than Scheduled castes.	23·63	39·27*	**41·12**
Indians	Hindus — Scheduled castes	..	0·11	**0·05**
Indians	Muslims	4·67	10·23*	**11·18**
Indians	Anglo-Indians and Domiciled Europeans.	6·49	10·51*	**10·91**
Indians—concld.	Sikhs	1·20	2·31*	**2·14**
Indians—concld.	Indian Christians	1·48	2·97*	**3·10**
Indians—concld.	Parsis	†	2·15*	**1·92**
Indians—concld.	Other communities	1·37	0·16	**0·11**
	TOTAL	38·84	67·71*	**70·53**

* Revised figures.

NOTE.—The staff on loan from the Indian Audit and Accounts Service are not included.

† Parsis included in "other communities" in 1934.

PART II.

Statement of subordinates on scales of pay rising to Rs. 250 per mensem and over if they are on old scales of pay and of subordinates on scales of pay rising to Rs. 200 per mensem and over if they are on new scales of pay (permanent and temporary) employed on Indian Government Railways on the 31st March 1934, 31st March 1945 and 31st March 1946.

31st March 1934.

Name of Railway	Europeans.	Indians. Hindus. Hindus, other than Scheduled castes.	Indians. Hindus. Scheduled castes.	Indians. Muslims.	Indians. Anglo-Indians and Domiciled Europeans.	Indians. Sikhs.	Indians. Indian Christians.	Indians. Parsis. †	Indians. Other communities.†	Indians. Total.	Total number on the Railway (column 2 plus 11).
1	2	3	4	5	6	7	8	9	10	11	12
Indian Government Railways.											
Bengal Assam	80	176	..	13	207	6	4	..	6	412	492
Bengal Nagpur	181	201	..	19	395	16	12	..	6	649	830
Bombay, Baroda and Central India	139	300	..	35	317	4	42	..	119	817	956
East Indian	477	458	..	53	921	17	7	..	5	1,461	1,938
Great Indian Peninsula . .	252	225	..	35	614	10	100	..	77	1,061	1,313
Madras and Southern Mahratta .	68	51	..	..	184	..	4	..	6	245	313
North Western	333	337	..	181	352	92	23	..	33	1,018	1,351
Oudh Tirhut	23	22	..	10	68	1	1	..	..	102	125
South Indian	39	90	..	6	159	..	10	..	1	266	305
Railway Board and miscellaneous offices.	1	134	..	27	24	12	5	..	2	204	205
TOTAL .	1,593	1,994	..	379	3,241	158	208	..	255	6,235	7,828

31st March 1945.

Name of Railway	Europeans.	Indians. Hindus. Hindus, other than Scheduled castes.	Indians. Hindus. Scheduled castes.	Indians. Muslims.	Indians. Anglo-Indians and Domiciled Europeans.	Indians. Sikhs.	Indians. Indian Christians.	Indians. Parsis.	Indians. Other communities.	Indians. Total.	Total number on the Railway (column 13 plus 22).
1	13	14	15	16	17	18	19	20	21	22	23
Indian Government Railways.											
Bengal Assam	55	591	2	83	241	12	10	..	6	945	1,000
Bengal Nagpur	35	359	1	40	552	28	17	2	2	1,001	1,036
Bombay, Baroda and Central India	110	461	3	51	259	9	54	98	40	975	1,085
East Indian	211	*827	3	108	879	19	*12	4	6	*1,858	*2,069
Great Indian Peninsula . .	100	416	4	120	589	14	110	88	40	1,381	1,481
Madras and Southern Mahratta .	32	99	..	2	147	1	8	6	..	263	295
North Western	148	*464	..	290	248	*105	*16	*12	5	*1,140	*1,288
Oudh Tirhut	13	55	2	19	74	1	1	..	1	153	166
South Indian	8	114	..	6	104	..	29	..	..	253	261
Railway Board and miscellaneous offices.	1	210	2	*71	10	14	6	..	..	4313	*314
TOTAL .	713	*3,596	17	*790	3,103	*203	*263	*210	100	*8,282	*8,995

31st March 1946.

Name of Railway	Europeans.	Indians. Hindus. Hindus, other than Scheduled castes.	Indians. Hindus. Scheduled castes.	Indians. Muslims.	Indians. Anglo-Indians and Domiciled Europeans.	Indians. Sikhs.	Indians. Indian Christians.	Indians. Parsis.	Indians. Other communities.	Indians. Total.	Total number on the Railway (column 24 plus 33).
1	24	25	26	27	28	29	30	31	32	33	34
Indian Government Railways.											
Bengal Assam	42	559	1	102	232	10	5	..	2	901	943
Bengal Nagpur	31	412	1	42	535	34	12	2	2	1,040	1,071
Bombay, Baroda and Central India	112	471	3	55	250	12	59	99	35	984	1,096
East Indian	190	875	4	128	882	24	10	5	10	1,938	2,128
Great Indian Peninsula . .	82	503	8	101	614	15	112	72	40	1,465	1,547
Madras and Southern Mahratta .	30	104	..	2	145	1	11	7	..	270	300
North Western	147	468	..	297	250	118	19	13	8	1,173	1,320
Oudh Tirhut	9	69	2	24	102	2	1	..	1	201	210
South Indian	8	139	..	12	124	..	31	..	..	306	314
Railway Board and miscellaneous offices.	1	238	2	82	11	17	10	..	..	360	361
TOTAL .	652	3,838	21	845	3,135	233	270	198	98	8,638	9,290

Statement showing the percentages of the relative strength of Europeans and Indian of various communities.

		1934.	1945.	1946.
Europeans . .	. . . .	20·35	*7·93	7·02
Indians	Hindus — Other than Scheduled castes.	25·47	*39·98	41·31
Indians	Hindus — Scheduled castes .	..	0·19	0·23
Indians	Muslims	4·84	*8·78	9·09
Indians	Anglo-Indians and Domiciled Europeans.	41·40	*34·50	33·75
Indians—*concld.*	Sikhs	2·02	*2·26	2·51
Indians—*concld.*	Indian Christians . . .	2·66	*2·92	2·91
Indians—*concld.*	Parsis	†	*2·33	2·13
Indians—*concld.*	Other communities . . .	3·26	1·11	1·05
	Total .	79·65	*92·07	92·98

*Revised figures.

† Parsis included in " other communities " in 1934.

It will be observed that the Indian element in the superior services has risen from 38·84 per cent. in 1934 to 70·53 per cent. in 1946. Among Indians the percentages by communities in the years 1934 and 1946 were as shown below :—

Communities.	Indian Govt. railways. Percentages. 1934.†	1946.
Hindus — Other than Scheduled Castes	23·63	**41·12**
Hindus — Scheduled Castes	..	**0·05**
Muslims	4·67	**11·18**
Anglo-Indians and Domiciled Europeans	6·49	**10·91**
Sikhs	1·20	**2·14**
Indian Christians	1·48	**3·10**
Parsis	*	**1·92**
Other communities	1·37	**0·11**

* Parsis were included in "Other communities" in 1934.

† Revised due to the transfer of management of Bengal Nagpur, Madras and Southern Mahratta and South Indian Railways to the Indian Government.

Turning to the subordinate staff on scales of pay rising to Rs. 250 per mensem and over in the old scales of pay and to Rs. 200 per mensem and over in the new scales of pay, the corresponding figures are as under :—

Communities.	Indian Govt. railways. Percentages. 1934.†	1946.
Europeans	20·35	**7·02**
Indians—		
Hindus — Other than Scheduled Castes	25·47	**41·31**
Hindus — Scheduled Castes	..	**0·23**
Muslims	4·84	**9·09**
Anglo-Indians and Domiciled Europeans	41·40	**33·75**
Sikhs	2·02	**2·51**
Indian Christians	2·66	**2·91**
Parsis	*	**2·13**
Other communities	3·26	**1·05**
Total Indians	79·65	**92·98**

* Parsis were included in "Other communities" in 1934.

† Revised due to the transfer of management of Bengal Nagpur, Madras and Southern Mahratta and South Indian Railways to the Indian Government.

88. Representation of minority communities in subordinate railway services.—The figures given in Appendix C. V (*b*), pages 269-270, of Volume II of this Report show by communities, the number and percentage of subordinate staff (excluding inferior servants and labourers), recruited to both permanent and temporary posts on Indian Government Railways during the year 1945-46. The following figures show the over-all

percentages in recruitment on Indian Government Railways during the eight years ending with 1945-46:—

—	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
(i) Combined percentage figures of permanent and temporary recruitment.								
Europeans	0·1	0·2	0·1	0·1	0·1	0·0	0·0	**0·0**
Hindus— Other than Scheduled Castes	56·0	57·5	56·9	62·1	66·0	66·4	67·8	**67·7**
Scheduled Castes	*	*	*	*	*	0·9	2·2	**1·8**
Muslims	29·9	29·2	28·8	27·5	24·7	24·9	22·7	**22·9**
Anglo-Indians and Domiciled Europeans	7·6	7·5	6·9	3·9	3·5	2·8	2·3	**2·5**
Sikhs	2·2	2·1	2·2	2·2	2·1	1·6	1·8	**1·6**
Indian Christians	3·4 }6·1	3·0 }5·4	4·3 }7·1	3·5 }6·2	3·0 }5·5	2·9 }4·8	2·7 }4·8	**3·0 }4·0**
Parsis	0·5	0·3	0·6	0·5	0·4	0·3	0·3	**0·3**
Other communities	0·3	0·2	0·2	0·2	0·2	0·2	0·2	**0·2**
(ii) Percentage figures of permanent recruitment.								
Europeans	0·3	0·2	0·1	0·1	0·1	0·0	0·0	**0·0**
Hindus— Other than Scheduled Castes	54·4	58·0	58·7	65·0	68·6	59·2	69·5	**64·2**
Scheduled Castes	*	*	*	*	*	1·4	2·8	**3·2**
Musilms	27·1	24·8	23·3	21·5	19·3	25·7	17·7	**22·6**
Anglo-Indians and Domiciled Europeans	10·3	9·5	9·6	5·7	5·3	6·8	4·4	**5·9**
Sikhs	2·2	1·8	1·3	1·2	1·3	1·1	1·0	**1·1**
Indian Christians	4·2 }7·3	4·5 }7·1	5·6 }7·9	5·2 }7·4	4·2 }6·3	4·4 }6·2	3·5 }4·7	**2·8 }3·9**
Parsis	0·9	0·8	1·0	1·0	0·8	0·7	0·2	**0·0**
Other communinities	0·6	0·4	0·4	0·3	0·4	0·7	0·9	**0·3**
(iii) Percentage figures of temporary recruitment.								
Europeans	..	0·2	0·1	0·1	0·1	0·0	0·0	**0·0**
Hindus— Other than Scheduled Castes	56·9	57·0	55·8	60·8	65·4	67·0	67·7	**68·3**
Scheduled Castes	*	*	*	*	*	0·9	2·1	**1·5**
Muslims	31·4	31·9	31·9	30·0	26·0	24·8	23·1	**22·9**
Anglo-Indians and Domiciled Europeans	6·1	6·3	5·4	3·2	3·0	2·4	2·1	**2·0**
Sikhs	2·2	2·4	2·7	2·6	2·2	1·6	1·9	**1·7**
Indian Christians	3·0 }5·5	2·0 }4·5	3·5 }6·6	2·8 }5·7	2·8 }5·3	2·8 }4·7	2·7 }4·9	**3·0 }5·1**
Parsis	0·3	0·1	0·4	0·3	0·3	0·3	0·3	**0·4**
Other communities	0·1	0·1	0·2	0·2	0·2	0·2	0·1	**0·2**

* Included along with 'Hindus other than Scheduled castes'.

NOTE.—Figures for 1935-36, 1936-37 & 1937-38 will be found in the Administration Report for 1944-45.

From the figures given above, it will be noticed that during the year under review, members of the Muslim, Anglo-Indian and Domiciled European and Scheduled caste communities failed to obtain their prescribed percentages of permanent and temporary posts. The shortage in recruitment of these minority communities was due generally to the poor response received to advertised vacancies.

89. North Western Railway Service Commission.—The Service Commission continued to function satisfactorily during the year under review. The Railway Board have now considered the future of this organisation and in view of its successful working are considering making it permanent. It was represented to the Board that as all interviews are held by the Commission at its Headquarters, *viz.*, Lahore, candidates residing some distance away from Lahore are generally reluctant to undertake long journeys when called for interviews. To overcome this difficulty the Board are considering the question of appointing an additional member to allow of recruitment being undertaken at selected centres away from the Headquarters.

The Railway Board are also considering the desirability of setting up similar commissions on other Indian Government Railways and it is proposed that Headquarters of these Commissions should be as follows:—

Headquarters.	*Railways.*
(1) Calcutta .	Bengal Assam and Bengal Nagpur Railways.
(2) Lucknow .	East Indian and Oudh Tirhut Railways.
(3) Bombay .	Bombay, Baroda and Central India and Great Indian Peninsula Railways.
(4) Madras .	Madras and Southern Mahratta and South Indian Railways.

90. Anti-Corruption Organization.—During the year under report the drive against bribery and corruption, which has been carried on on Indian Government Railways since 1942, was continued with full vigour by the Special Police Establishment. The specially selected senior Railway subordinate staff from each railway, with extensive knowledge of railway working, assisted the Special Police in detecting cases which were investigated and sent up for trial in Courts or before Tribunals. During the year under review ninety-one cases were taken up by the Special Police, seventy-seven of which were sent up for trial in Courts or before Tribunals resulting in the conviction of fortyone persons. This brings the total number of cases so far taken up to 393 and the number of persons convicted to 183. The analysis has shown that a larger proportion of these cases were detected in the Traffic and Commercial Departments of the Railways. Eighteen cases in which the evidence was not sufficiently strong to warrant the conviction of a corrupt official in a Court of Law, were referred to Railway Administrations for departmental action to bring home to the delinquents that the Administration had no place for those who indulged in corrupt practices. In order to keep the public and the general body of Railway servants informed of the measures taken and the progress made in this behalf, Press Notes continued to be issued periodically giving the number of convictions obtained.

91. Organised Labour—All-India Railwaymen's Federation.—During the year under review two meetings were held between the Railway Board and the All-India Railwaymen's Federation, *viz.*, a special meeting on 15th August 1945 and the 24th half-yearly meeting on the 5th December 1945. In between these two meetings there was also an informal discussion between the General Secretary of the All-India Railwaymen's Federation and the Chief Commissioner of Railways on the 24th September 1945. At the special meeting the subjects discussed were (*a*) re-employment of staff temporarily employed on railways, (*b*) revision of scales of pay and (*c*) dearness allowance.

At the informal discussion held on the 24th September 1945 the Board's policy and the instructions they had issued to the railways in regard to the procedure to be followed in the case of reduction of temporary staff, and absorption of *ex*-service personnel, etc., which were designed to reduce to a minimum the number of men to be discharged were explained to the General Secretary of the Federation. His attention was drawn to the exaggerated statements that had appeared in the Press regarding the number of men that would be discharged, and he was asked to use his best endeavours to prevent undesirable and unnecessary alarms that such accounts might cause. The suggestions made by the Federation to minimise reduction of staff were then discussed and the Railway Board agreed to consider some of them.

At the 24th half-yearly meeting which took place on 5th December 1945, the subjects discussed were (1) the policy in the matter of discharge of staff, (2) dearness allowance and (3) post-war scales of pay.

92. Grain and Grocery Shops.—The Railway Grainshop Organisation last reviewed in paragraph 90 of the report for 1944-45 continued to function satisfactorily during the year under report. More attention was, however, paid to providing better service than increasing the number of shops or commodities. With the increase in the market rates of the commodities supplied through these shops at concessional rates, the loss incurred by railways increased correspondingly. Due to acute shortage of foodgrains in the country, Provincial Governments generally had to reduce the scale of the ration of cereals towards the close of the year. In order to make up the deficiency caused by this reduction, immediate steps were taken to introduce in the grainshops alternative foodstuffs which were made available to staff at concessional rates. Another step taken was to increase the scale of pulses from 4 seers to 6 seers per adult per month. Manual labour employed on railways was naturally concerned regarding the reduction in cereals. A list

of categories of railway employees falling within the classification of Heavy Manual Workers was, therefore, drawn up in consultation with the Food Department of the Government of India and Provincial Governments were requested to make arrangements to issue a supplementary ration of cereals to this class of railway employees. Further, in order to provide staff with cheap and wholesome meals to meet the reduction in the ration, steps were taken to establish, on railways, cooked-food canteens which could obtain their requirements of foodstuffs from the Railway Grainshops at 20 per cent. below the controlled rate or 20 per cent. below the cost price.

At the close of the year, the number of Railway Grainshops was 760 (584 static and 176 mobile); the number of ration card holders at the end of March 1946, stood at 934,000. Foodstuffs to the extent of 18,909,000 maunds were sold by the shops during the year with an average of 1,576,000 maunds per month or 1·73 maunds per month per ration card holder. The value of sales during the year totalled about Rs. 19 crores (varying from Rs. 1·4 crores in April 1945 to Rs. 1·7 crores in March 1946) giving an average sale of about Rs. 1·6 crores per month or Rs. 17·3 per ration card holder per month. The cost of all the commodities sold during the year amounted to about Rs. 30 crores, while the cash realised by sales to employees at concessional prices was Rs. 19 crores, so that the loss incurred by affording relief in kind to the staff was approximately Rs. 11 crores. The relief afforded to staff measured in terms of the difference between the railway selling prices and the local market prices during the year was Rs. 15 crores with an average relief per ration card holder per month of Rs. 13·7. The cost of the Organisation for the year under review was Rs. 2·9 crores. This includes freight, cartage and handling charges amounting to Rs. 58·4 lakhs, a substantial portion of which came back into Railway Revenues. The grainshop facilities helped greatly in stabilising the Railwayman's cost of living and relieved him from the constant anxiety of not being able to cope with the high market prices of foodstuffs. The *per capita* basis of distribution enabled every railway employee to obtain relief in proportion to his actual needs.

It was stated in the concluding sub-paragraph of paragraph 90 of the last year's report that arrangements had been made for opening grocery shops on railways and that 30 grocery shops had been opened at important centres. The grocery shops on the Railways continued to perform the useful purpose for which they had been introduced. More grocery shops were opened and in September 1945 the number of shops rose to 38. Consequent, however, on the cessation of hostilities and a general improvement in the availability of the imported stores in the market, it was decided to wind up a number of grocery shops on Railways. In the course of the remaining months of the year under review, those shops which ran at a loss were closed down and the number of shops at the end of the year dropped to 20.

93. **Dearness Allowance.**—In paragraph 91 of the last year's report, mention was made of the scales of Dearness Allowance remaining the same as at the close of the year 1944-45. During the year under review also the rates of Dearness Allowance remained the same as they stood on the 1st January 1945.

94. **Defence of India Corps (Railways).**—The Defence of India Corps (Railways) was disbanded on the 1st December 1945. A nucleus staff consisting of a few officers and some clerks was, however, retained in the Administrative Headquarters Groups of the five militarized Railways for a few months after the disbandment of the Corps to carry out its final winding up. By the end of 1945 approximately 1,45,000 militarized railway staff had reverted to civil status.

95. **Railway Staff and the War.**—In paragraph 93 of the last year's report it was stated that the release of the Railway staff from the Army came to a standstill towards the close of the year 1944-45. The situation, however, improved considerably during the latter half of the period under review as

the release of officers and men consequent upon the cessation of hostilities began to take effect. There were only 24 Railway officers and 2,363 men with the War Department on 31st March 1946.

The production of munitions continued to be undertaken in the Railway Workshops during the period under review but the volume of work was reduced considerably after the cessation of hostilities in the East. The number of Railway staff solely engaged on War work on 31st March 1946 was only 2,000 as compared with 18,000 on the same date last year. The scheme for the training of Railway staff for Railway Military Units was discontinued with effect from 15th November 1945, about 40,000 men having completed their training by that date. The scheme for training technical staff on behalf of the Labour Department continued during the period under review. The total number of men who had completed their training up to 31st March 1946 was 16,220.

96. Introduction of weekly rest for Gangmen.—In paragraph 94 of the report for the previous year, it was stated that the General Managers of Railways were asked to report cases to the Board where it was not possible to implement their orders regarding the grant of weekly rest to permanent-way staff on any particular section or sections of their Railways in terms of amended Rule 6-A of the Hours of Employment Rules introduced during the close of the year 1944-45. Some Railways found it difficult to give effect to this decision as they were experiencing considerable difficulty in keeping permanent-way gangs up to strength. After the cessation of hostilities, however, the position in this respect considerably eased and Railway Administrations are implementing the decision as circumstances permit them to do so. Railways were further advised in October 1945 that the introduction of a weekly rest day for permanent-way staff would also enable them to absorb considerable numbers of temporary hands who would otherwise be rendered surplus to requirements.

97. Labour Legislation.—During the year under review two important Acts affecting Railway Labour were passed by the Central Legislature, *viz.*, the Factories (Amendment) Act, 1945 and the Workmen's Compensation (Amendment) Act, 1946.

Extending to all perennial factories registered under the Factories Act, 1934, the Factories (Amendment) Act, 1945, ensures compensatory holidays to workers deprived of the weekly holidays as a result of the passing of an order or the making of a rule under the exempting provisions of the Act. The most important feature of this Amendment Act is the statutory enforcement of annual paid holidays for Factory Workers. The Amendment Act, however, provides for the exemption of Factories from the provision relating to holidays with pay where a Provincial Government is satisfied that the leave rules applicable to workers in a Factory provide for substantially similar benefits. Under the Leave Rules applicable to railway employees as liberalised subsequent to the enactment of the Factories (Amendment) Act, 1945, the Railway workers governed by the Factories Act are eligible on the whole for leave on a more liberal scale than that provided in the Act. It was, therefore, proposed to address Provincial Governments with a view to securing exemption for the Railway Factories from the provisions of the Factories (Amendment) Act.

Under the Workmen's Compensation Act, 1923, staff earning 'wages' exceeding Rs. 300 a month were not entitled to compensation. With the passing of the Workmen's Compensation (Amendment) Act, 1946, staff drawing 'wages' up to and including Rs. 400 a month have been brought within the purview of the main Act.

98. Resettlement of Temporary Staff.

(i) *Temporary staff working against permanent vacancies.*—The Government of India decided in June 1942 that all permanent vacancies

occurring thereafter till the end of the war in the Central services should be filled on a temporary basis only, so that after the war, a percentage of these vacancies might be filled on a permanent basis by *ex*-service men. In pursuance of this decision, 70 per cent. (about 77,000) of the vacancies which occurred during the period from 1st June 1942 to 31st December 1945 have been reserved for war service candidates. The remaining 30 per cent. (numbering about 33,000) are to be filled permanently by selection of suitable candidates through properly constituted Selection Boards from among the 110,000 staff who were working against the permanent vacancies in a temporary capacity, due regard being paid to seniority and the rules regarding communal reservation. A waiting list is maintained of the temporary staff considered suitable but not selected for confirmation against the 30 per cent. vacancies.

Permanent vacancies occurring from 1st January 1946 are not reserved for war service candidates. Fifty per cent. of these vacancies in the subordinate grades are filled by staff on the waiting list and the remaining 50 per cent. from the open market. So far as the inferior and labour establishments are concerned, all vacancies are filled from the staff on the waiting list.

(ii) *Temporary staff working against temporary vacancies.*—Railways were instructed in September 1945, that they should make every effort to find alternative employment for staff rendered surplus due to abolition of posts or other causes, in other works, such as Post-war Reconstruction Schemes, and that discharges should be undertaken only if the Administrations were satisfied that all possible avenues of finding employment had been explored. When discharges were unavoidable, those whose services were to be dispensed with were nominated by Selection Committees on the principle of length of service subject to the proviso that discharges did not adversely affect the minority communities on the Railway. Steps were also taken to minimise unemployment as far as possible by spreading discharges over a period so as to avoid suddenly throwing large numbers of men out of work. In the case of unavoidable large reductions of staff, the Provincial Governments and Labour Unions concerned were to be contacted. The particulars of all discharged employees were also sent to the Employment Exchanges in order that the men may be found employment elsewhere.

Up to the end of March 1946, about 24,610 staff were rendered surplus, of whom about 18,140 were re-absorbed in other employment and only 6,470 were discharged. This figure includes a substantial number of men who were recruited on behalf of other Government departments during the war for work not connected with the Railways and whose services had to be dispensed with on completion of the work for which they were recruited.

CHAPTER VIII

AMENITIES FOR PASSENGERS

99. With the termination of war, conditions did not show much change and consequently the restoration of pre-war facilities to the public was necessarily a slow process. No regular programme for the provision of amenities for passengers during the year under review could be undertaken but efforts were made to improve the general conditions of travel by introducing additional train services as far as possible and by taking other measures referred to in the following paragraphs :—

100. New third class carriages.—53 new third class bogie carriages conforming to the approved standard laid down in 1939 were constructed and placed in service as against 26 during the previous year.

101. Measures taken to ensure security of women passengers.—The safety of women passengers continued to receive the close attention of Railway Administrations. Further progress was made in the provision of safety catches on doors and windows of intermediate and third class compartments reserved for ladies as stock passed through shops. The location of third class compartments for ladies as near as possible to the Guard's van also received attention. The Railways remained fully alive to the importance of maintaining of all security fastenings in good repair, particularly those in ladies' compartments.

102. Booking offices and out-agencies.—On the South Indian Railway a town booking office at Calicut and an out-agency at Sittodu were opened during the year. On the North Western Railway two out-agencies and five city booking offices were opened and improved reservation arrangements were made at Lahore by opening a combined booking and reservation office in one of the rooms of the Headquarters' office. (See plate XI.) On the Great Indian Peninsula Railway a separate booking office at Dehu Road were provided and in addition the following three stations were opened for goods traffic :—

1. Tapona .	For booking of outward Government Grain Traffic consigned by the Secretary to the Central Provinces Government, Food Department.
2. Ajhai . 3. Chata .	For outward despatch of sugarcane traffic in wagonloads to Dabra.

On the Bengal Assam Railway also two independent booking stations were opened for Military traffic and three for general goods traffic.

Further, with the termination of hostilities several stations which had been closed during the war were reopened.

103. Waiting Rooms and Waiting Halls.—During the year under review, additional waiting rooms and waiting halls, etc., were provided as follows :—

Great Indian Peninsula Railway.—Waiting rooms and lavatories for upper class passengers were provided at Dehu Road and a waiting shed was also provided on the Down platform at this station.

East Indian Railway.—Waiting Halls were provided at Karamtalla, Mathurapur and Kalyanpur Road.

North Western Railway.—A third class waiting room for women only was provided at Multan City.

South Indian Railway.—Separate accommodation for women was provided in the third class waiting hall at Madura Station.

Improvements were also effected by railways to existing waiting halls with additional facilities for dealing with traffic at several stations and such matters as cleanliness of station premises, improvements in water supply and provision of additional benches, etc., received close attention.

Consequent on the withdrawal of lighting restrictions full lighting in waiting rooms and station buildings, etc., was also restored at a number of stations.

104. Covered and raised platforms.—The following statements show the position at the end of the year 1945-46 in regard to platforms generally :—

Number of stations provided with covered platforms.

—	B. A.	B. N.	Bk. S.	B., B. & C. I.	E. I.	G. I. P.	Jodhpur.	M. & S. M.	Mysore State.	† H. E. H. the N. S.	N. W. C.	N. W. S.	O. T.	S. I.
1. Total number of stations open for passenger traffic.	796	568	111	582	727	553	169	498	127		858	176	353	581
(i) Class D (or flag) stations.	215	65	33	94	83	71	56	69	11		226	37	20	137
(ii) Other than class D (or flag) stations.	581	503	78	488	644	482	113	429	116		632	139	333	444
2. (i) Number of stations at which there are two or more platforms.	122	83	†	108	403	190	8	67	8		226	13	38	85
(ii) Total number of platforms at such stations.	304	176	†	268	994	458	27	179	18		533	30	95	224
(iii) Total number of covered platforms at such stations.	120	4	*Nil*	178	229	130	8	67	7		144	3	*Nil*	97
(iv) Percentage of (iii) to (ii).	39·5	2·3	*Nil*	66·4	23·0	28·3	29·6	31·8	43·8		27·0	10·0	*Nil*	43·3
3. (i) Number of stations other than class D at which there is only one platform.	466	429	†	406	259	301	105	362	109		429	131	293	359
(ii) Number of such stations at which there are covered platforms.	*Nil*	1	*Nil*	4	56	9	*Nil*	22	3		8	1	*Nil*	8
(iii) Percentage of (ii) to (i).	*Nil*	0·23	*Nil*	0·99	21·6	2·99	*Nil*	6·08	2·75		1·86	0·76	*Nil*	2·23

C.=Commercial. S.=Strategic.

† Information not furnished by the Railway.

Number of stations provided with platforms above rail level.

—	B. A.	B. N.	Bk. S.	B., B. & C. I.	E. I.	G. I. P.	Jodhpur.	M. & S. M.	Mysore State.	† H. E. H. the N. S.	N. W. C.	N. W. S.	O. T.	S. I.
1. Total number of stations open for passenger traffic.	796	568	111	582	727	553	169	498	127		858	176	353	581
(i) Class D (or flag) stations.	215	65	33	94	83	71	56	69	11		226	37	20	137
(ii) Other than class D (or flag) stations.	581	503	78	488	644	482	113	429	116		632	139	333	444
2. (i) Number of stations other than flag stations at which there are more than one platform.	115	76	2	98	383	162	8	67	8		213	13	38	85
(ii) Total number of platforms at such stations.	288	159	4	247	954	401	27	179	18		510	28	95	224
(iii) Total number of platforms at such stations above rail level.	197	132	3	233	606	333	20	162	11		387	23	66	153
(iv) Percentage of (iii) to (ii).	68·4	83·0	75·0	94·3	63·5	83·0	74·1	90·5	68·8		75·9	82·1	69·5	68·3
3. (i) Number of stations at which there is only one platform.	674	482	109	470	322	336	161	431	119		630	163	313	496
(ii) Number of such stations at which platforms are above rail level.	131	124	10	200	174	193	11	281	41		200	79	147	273
(iii) Percentage of (ii) to (i).	19·4	26·0	9·17	42·6	54·0	57·4	6·83	65·2	34·4		31·8	48·5	47·0	55·0

C.=Commercial. S.=Strategic.

† Information not furnished by the Railway.

105. Catering.—The general scarcity of foodstuffs and the high level of prices made catering extremely difficult during the year and the position was to some extent aggravated by the necessity for reducing meals in dining cars and refreshment rooms to an austerity level. In spite of these handicaps the standard of service was well maintained.

Checks were made at frequent intervals by Traffic and Medical Officers of Railways on the quality of food supplied to passengers and on the cleanliness of its preparation. Following a suggestion made by the Central Advisory Council for Railways, General Managers were requested to invite members of the Local Advisory Committees to make surprise checks of vending arrangements and kindred matters.

The extension of the Bihar Food Adulteration Act to eatables sold at railway stations on the Oudh Tirhut Railway assisted materially in maintaining a good standard of quality of foodstuffs on that railway.

Some half-a-dozen new refreshment rooms and food stalls were opened at various stations and the Great Indian Peninsula Railway introduced a "Catering Courier Service" on the Grand Trunk Express between Wardha and Delhi on lines similar to those of the Madras and Southern Mahratta Railway's Catering Courier Service mentioned in last year's Report. Buffet Car Services were introduced on certain trains on His Exalted Highness the Nizam's State Railway and an Ærated Water Service on the Madras-Lahore Military Mail trains was also introduced by that railway.

106. Steps taken to make available maximum passenger accommodation in running trains.—An increase of 13 per cent. over the previous year in the number of passengers carried again necessitated the maximum use being made of all available stock. Releases of rolling stock by the Defence Department were not up to expectation in spite of constant pressure but 45 newly built or converted broad gauge and 56 similar metre gauge coaches were put into service during the year. The restoration of a number of train services resulted in an increase, amounting in the aggregate to 9·05 per cent., in passenger and mixed train miles as compared with the previous year. The loads of passenger trains were strengthened wherever necessary within the permissible hauling capacity of the engines, and special trains were run for Military personnel. Intensified efforts were also made to prevent ticketless travellers taking up accommodation in trains.

107. Cleanliness of coaching stock.—The question of cleanliness of coaching stock received constant attention during the year, and various schemes for implementing the recommendations relating to this subject, which were made at a meeting of Railway Representatives with the Board in January 1945, were completed.

Close attention was also paid to ease of maintaining cleanliness when preparing new designs of coaching stock.

CHAPTER IX

ACCIDENTS

108. Accidents.—The following are the details of major accidents which occurred during the year:—

On the 5th May 1945, Military Special No. 143 carrying military personnel, stabled at the Ballast Quarry Siding at Maibong station on the Bengal Assam Railway, rolled down the gradient for about a mile due to the impact of the engine when being attached to it and dashed against the dead-end buffer of the siding. Two coaching vehicles and one goods vehicle capsized resulting in the death of 13 persons and injuries to 81. The total cost of damage to the rolling stock was Rs. 58,600 approximately.

On the 7th May 1945, on the Up line of the double line section between Raver and Waghoda stations on the Great Indian Peninsula Railway, while engineering gangmen were engaged in sleeper renewal work, a Troop Special ran past the site of work on the Down line and a loose rail lying between the Up and Down lines became entangled with the underframe of a passenger coach and was dragged along projecting across the Up track striking several gangmen who could not get out of the way in time. Twelve gangmen were killed and 18 injured.

On the night of 21st May 1945, while DAY 65 Up Goods was entering the loop line at Monirampur station on the East Indian Railway, No. 83 Up Parcels Express entered the block section and ran into the rear of the goods train. In consequence 3 wagons and a brakevan of the goods train were telescoped and the engine and tender of 83 Up derailed and capsized. The leading Inter-3rd bogie, though it was derailed, escaped serious damage, while the following three bogies were telescoped. Fourteen passengers were killed and 72 injured. The total damage to rolling stock and permanent way amounted to Rs. 1,50,000 approximately.

On the 24th May 1945, while passing the Crossing Cabin at Moghalsarai Junction on the East Indian Railway, a fire broke out in Ambulance Special No. 2. Two Air-conditioned coaches and a Ward car on the train were burnt out. There were no casualties. The cost of the damage was Rs. 2,75,000 approximately.

On the 28th July 1945, while No. 99 Up Benares Passenger was entering Moghalsarai Junction on the East Indian Railway, it came into side collision with two coupled pilot engines which were standing fouling the main line at the entrance line taking off the main line. Seventeen persons were killed and 7 injured. The total cost of damage to engines and rolling stock was Rs. 3,600 approximately.

On the 7th November 1945, when No. 2 Down Darjeeling Mail, after passing over the Down main line of Atrai station on the Bengal Assam Railway, was entering the single line section which crosses the bridge over the Atrai river, 15 Up North Bengal Express entered the section from the opposite end and collided with No. 2 Down Mail. Ten passengers were killed and 52 injured. The total damage to rolling stock and permanent way amounted to approximately Rs. 88,800.

On the 25th November 1945, while No. 369 Up Goods was being shunted from one line to another at Mala station on the Oudh Tirhut Railway, No. 8 Down Passenger running against signals, came into the station and collided head-on with it. Eight passengers were killed and 12 injured. The total cost of damage to rolling stock and permanent way was approximately Rs. 5,000.

On the 12th January 1946, while No. 37 Up Goods was being received on line No. 3 at Manipur Road station on the Bengal Assam Railway,

No. 656 Down Mixed entered the same line from the opposite direction and collided with the Up Goods, resulting in serious injury to one and minor injuries to 12 persons. The total cost of damage to rolling stock and permanent way was approximately Rs. 2,000.

On the 26th January 1946, while No. 733 Up Goods was standing on line No. 2 at Gobardanga station on the Bengal Assam Railway, No. 36 Down Passenger train entered the same line from the opposite direction and collided with the Up Goods, resulting in serious injuries to 3 and minor injuries to 43 persons. The total cost of damage to rolling stock and permanent way was approximately Rs. 9,500.

On the 4th March 1946, when No. 723 Up Goods was being received on the first loop at Baghauli station on the East Indian Railway, No. 10 Down Express entered the station on the same line from the opposite direction resulting in a head-on collision. The first two bogies of 10 Down Express were telescoped and the third bogie was partly smashed. Forty-eight passengers were killed and 76 injured. The total cost of damage to rolling stock and permanent way was Rs. 1,61,800 approximately.

109. Review of Accident Statistics.—(*a*) The following table shows the number of passengers, railway servants and other persons killed and injured in accidents on Indian Railways, exclusive of casualties in railway workshops, during the year 1945-46 as compared with the previous year :—

Cause.	Killed.		Injured.	
	1944-45.	**1945-46.**	1944-45.	**1945-46.**
A. Passengers.				
(i) In accidents to trains, rolling stock, permanent way, etc.	40	**89**	234	**253**
(ii) In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	664	**716**	2,346	**2,309**
(iii) In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	2	..	56	**4**
TOTAL	706	**805**	2,636	**2,566**
B. Railway servants.				
(i) In accidents to trains, rolling stock, permanent way, etc.	46	**53**	183	**211**
(ii) In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	274	**286**	6,714	**7,384**
(iii) In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	43	**42**	16,655	**19,565**
TOTAL .	363	**381**	23,552	**27,160**
C. Other than passengers and railway servants.				
(i) In accidents to trains, rolling stock, permanent way, etc.	71	**64**	153	**153**
(ii) In accidents caused by movement of trains and railway vehicles exclusive of train accidents.	3,072	**3,167**	1,297	**1,017**
(iii) In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	27	**21**	136	**116**
TOTAL .	3,170	**3,252**	1,586	**1,286**
GRAND TOTAL .	4,239	**4,438**	27,774	**31,012**

(*b*) Of the total of 4,438 persons killed, 3,252 or 73 per cent. were other than passengers and railway servants and of this number 2,711 were trespassers and 372 were reported to be suicides. Furthermore 63 persons were killed on railway premises otherwise than during the movement of trains, vehicles, etc.

(*c*) As compared with the previous year :—

(i) the number of passengers killed in accidents to trains, rolling stock, permanent way, etc., increased by 49, as the result of a larger number of casualties in major accidents, the increase of 52 passengers killed in accidents caused by movement of trains and railway vehicles other than train accidents being due mainly to an increase under the head " falling on to the platforms, ballast, etc., when getting into or out of trains ",

(ii) the increase in the number of railway servants killed is slight,

(iii) the number of persons other than passengers and railway servants killed increased by 95 in accidents caused by movement of trains and railway vehicles, other than train accidents, due principally to an increase in the number of " suicides ".

In considering these figures it should be borne in mind that there was an increase of about 6·8 millions in passenger and mixed train miles as compared with the previous year. The following statement shows the number of passengers killed and injured in train accidents only, *i.e.*, collisions, derailments, etc., during the last five years as compared with the number carried :—

	*Number of passengers carried (in millions).	Killed.		Injured.	
		† Number.	Per million passengers carried.	† Number.	Per million passengers carried.
1941-42 . .	652	14	0·02	128	0·20
1942-43 . .	653	30	0·05	254	0·39
1943-44 . .	828	170	0·21	493	0·60
1944-45 . .	971	34	0·04	132	0·14
1945-46 . .	**1,093**	**89**	**0·08**	**253**	**0.23**

* Represents total of numbers carried on all railways.
† Excludes train wrecking and attempted train wrecking.

(*d*) On Class I Railways, the number of railway servants killed and injured in accidents due to the movement of trains and railway vehicles, exclusive of train accidents, increased by 10 and 654 respectively.

The following table analyses the main causes for these accidents :—

Causes.	Killed.		Injured.	
	1944-45.	**1945-46.**	1944-45.	**1945-46.**
(i) Misadventure or accidental	205	**216**	6,303	**6,948**
(ii) Want of caution or misconduct on the part of the injured person.	58	**55**	274	**294**
(iii) Want of caution or breach of rules, etc., on the part of servants other than the person injured.	2	**4**	68	**58**
(iv) Defective apparatus appliances, etc., or want of sufficient appliances, safeguards, etc.	..	..	1	..
TOTAL .	265	**275**	6,646	**7,300**

(*e*) The following statement analyses the accidents which occurred during the last two years, grouped under certain principal heads. A statement showing the accidents in greater detail for each railway will be found in Appendix D of Volume II of the Report:—

	1944-45.	1945-46.
(1) Derailments not involving passenger trains	8,221	**8,902**
(2) Running over cattle	4,511	**4,508**
(3) Accidents due to failure of engines owing to faulty material, workmanship and operation arising from the working of the running staff	3,716	**4,001**
(4) Accidents due to failure of couplings and draw gear	2,746	**3,181**
(5) Accidents due to failure of engines owing to faulty material and workmanship in the Mechanical Department	909	**1,233**
(6) Fires in trains or at stations or bridges	493	**577**
(7) Accidents due to other rolling stock failures	682	**347**
(8) Derailments of passenger trains	329	**288**
(9) Broken rails	199	**202**
(10) Collision involving goods trains or goods vehicles	258	**177**
(11) Trains running into road traffic at level crossings	159	**150**
(12) Running over obstructions (other than those included under "Train wrecking", "Attempted train wrecking" and "Trains running into road traffic at level crossings")	124	**149**
(13) Accidents due to failure of axles	86	**125**
(14) Flooding of permanent way	133	**94**
(15) Land-slips	128	**80**
(16) Accidents due to failure of tyres and wheels	29	**76**
(17) Collisions involving passenger trains	91	**73**
(18) Collisions between light engines	74	**67**
(19) Attempted train wrecking	60	**66**
(20) Accidents due to failure of brake apparatus	30	**61**
(21) Passenger trains running in the wrong direction through points but not derailed	23	**52**
(22) Train wrecking	2	**12**
(23) Failure of bridges, tunnels, etc.	6	**4**
(24) Miscellaneous	326	**393**
TOTAL	23,335	**24,818**

(*f*) The total number of accidents shows an increase of 1,483 as compared with the previous year against an increase in the total train miles of 9·9 millions.

(i) Derailments not involving passenger trains still account for the largest number of accidents, *i.e.*, 36 per cent. of the whole; next in order are:—

	Per cent.
Running over cattle	18
Accidents due to failure of engines owing to faulty material, workmanship and operation arising from the working of the running staff	16
Accidents due to failure of couplings and draw gear	13
Accidents due to failure of engines owing to faulty material and workmanship in the Mechanical Department	5
Fires in trains or at stations or bridges	2
Accidents due to other rolling stock failures	1
Derailments of passenger trains	1

(ii) Accidents in railway workshops accounted for the death of 5 and injuries to 14,185 railway servants or a decrease of 10 in the former and an increase of 717 in the latter as compared with the previous year.

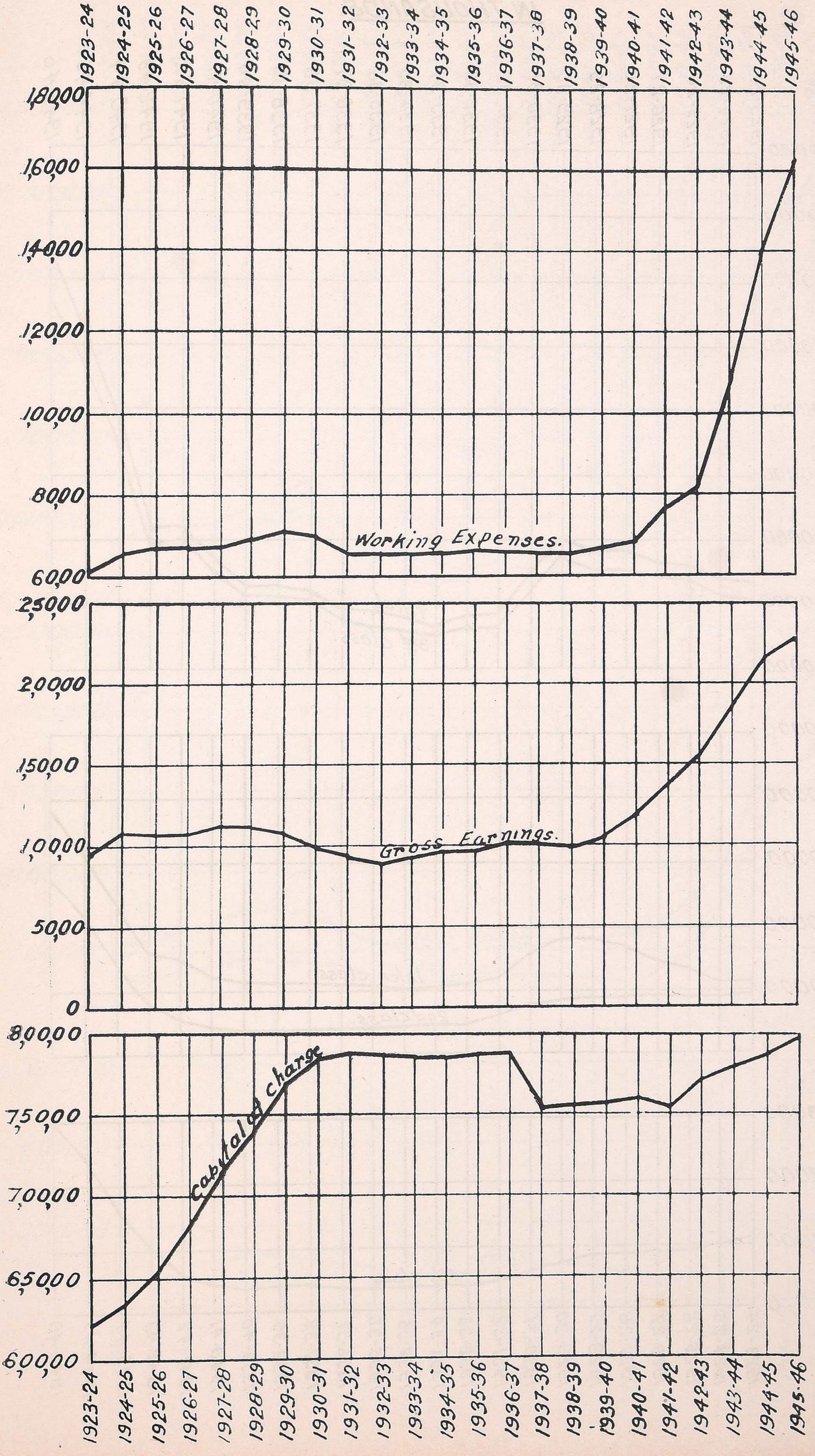
APPENDIX A.

GRAPHS

TOTAL CAPITAL AT CHARGE, TOTAL GROSS EARNINGS AND TOTAL WORKING EXPENSES OF INDIAN GOVT. RAILWAY LINES.

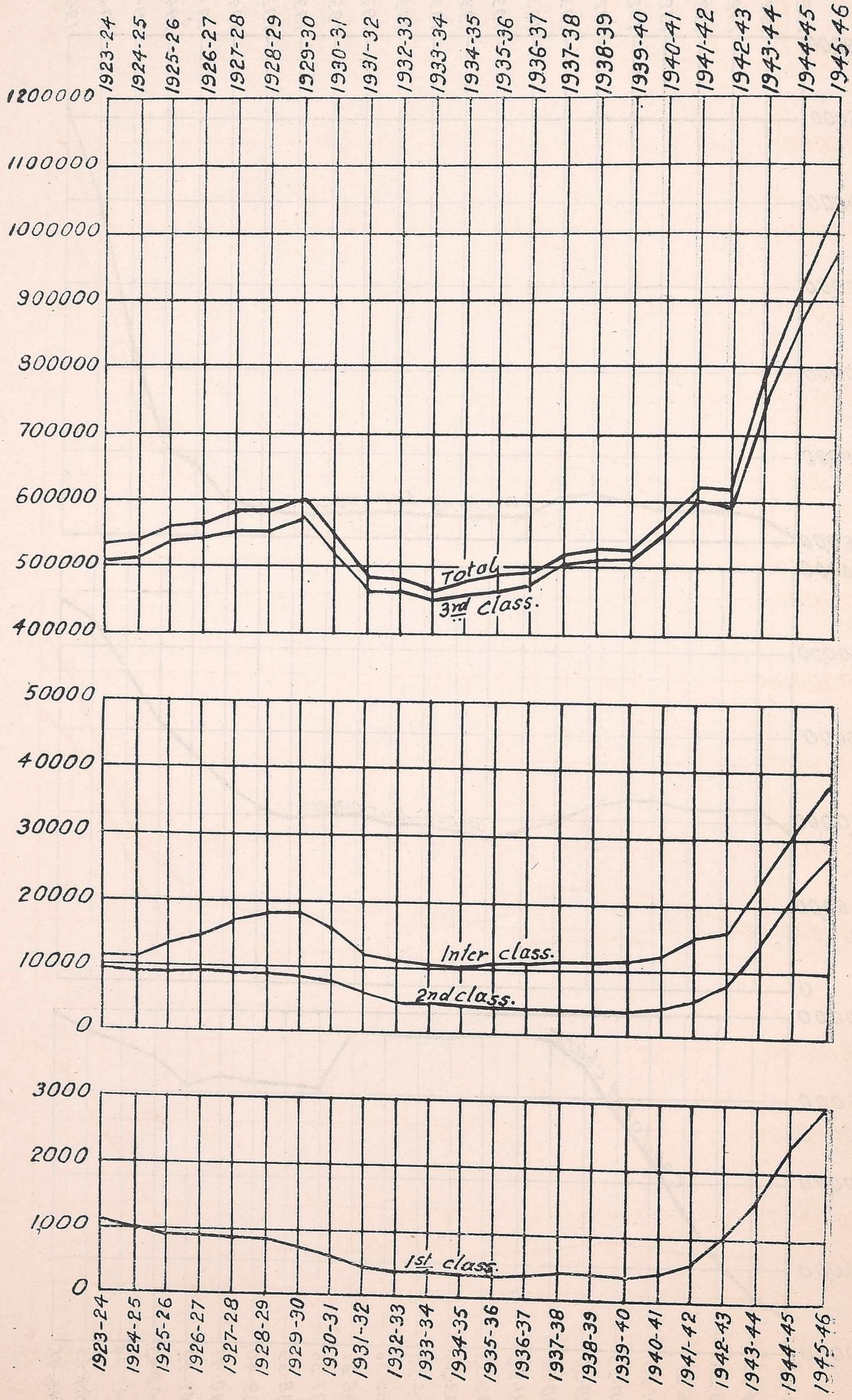
BURMA RAILWAYS EXCLUDED FROM 1937-38.

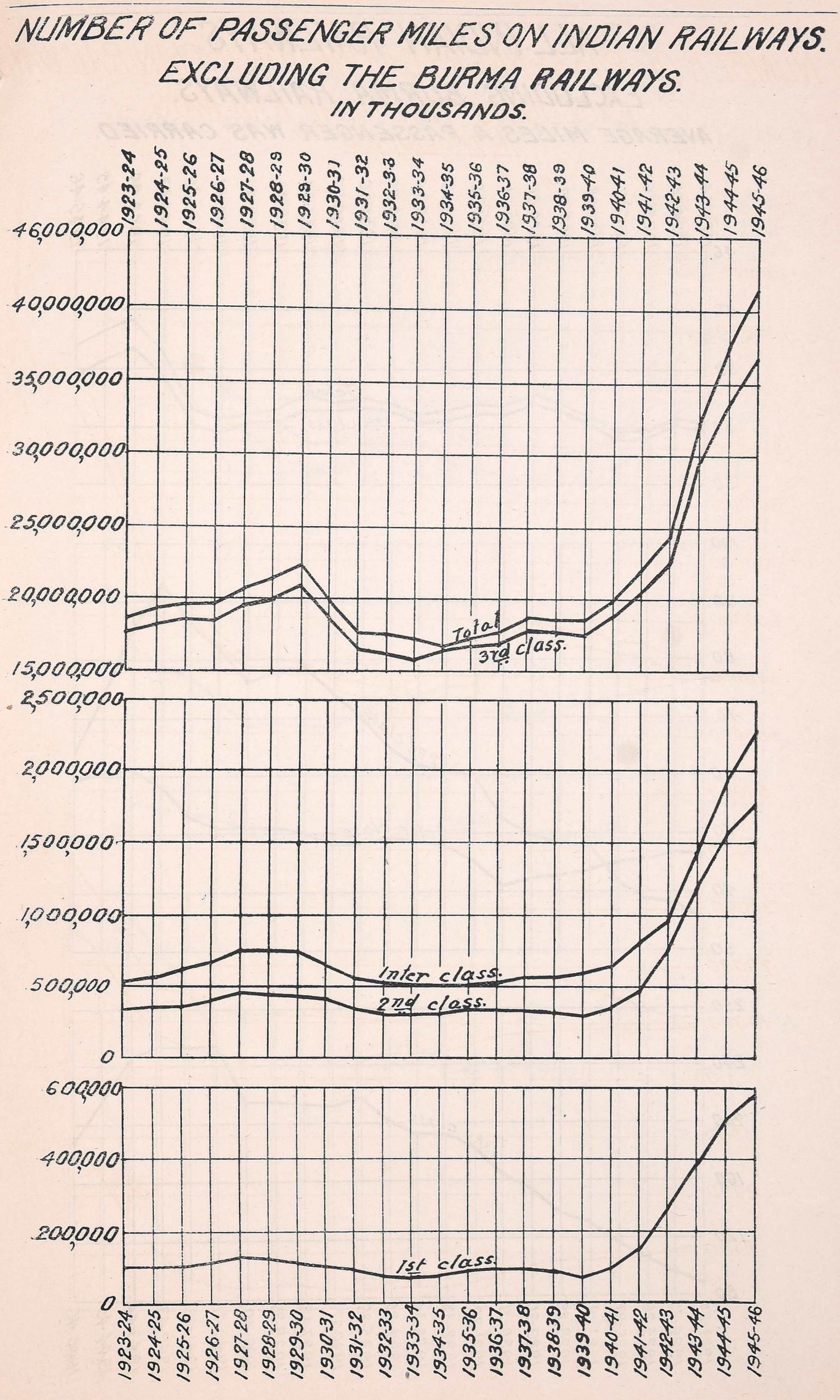
FIGURE IN LAKHS OF RUPEES.



NUMBER OF PASSENGERS CARRIED ON INDIAN RAILWAYS, EXCLUDING THE BURMA RAILWAYS.

IN THOUSANDS.

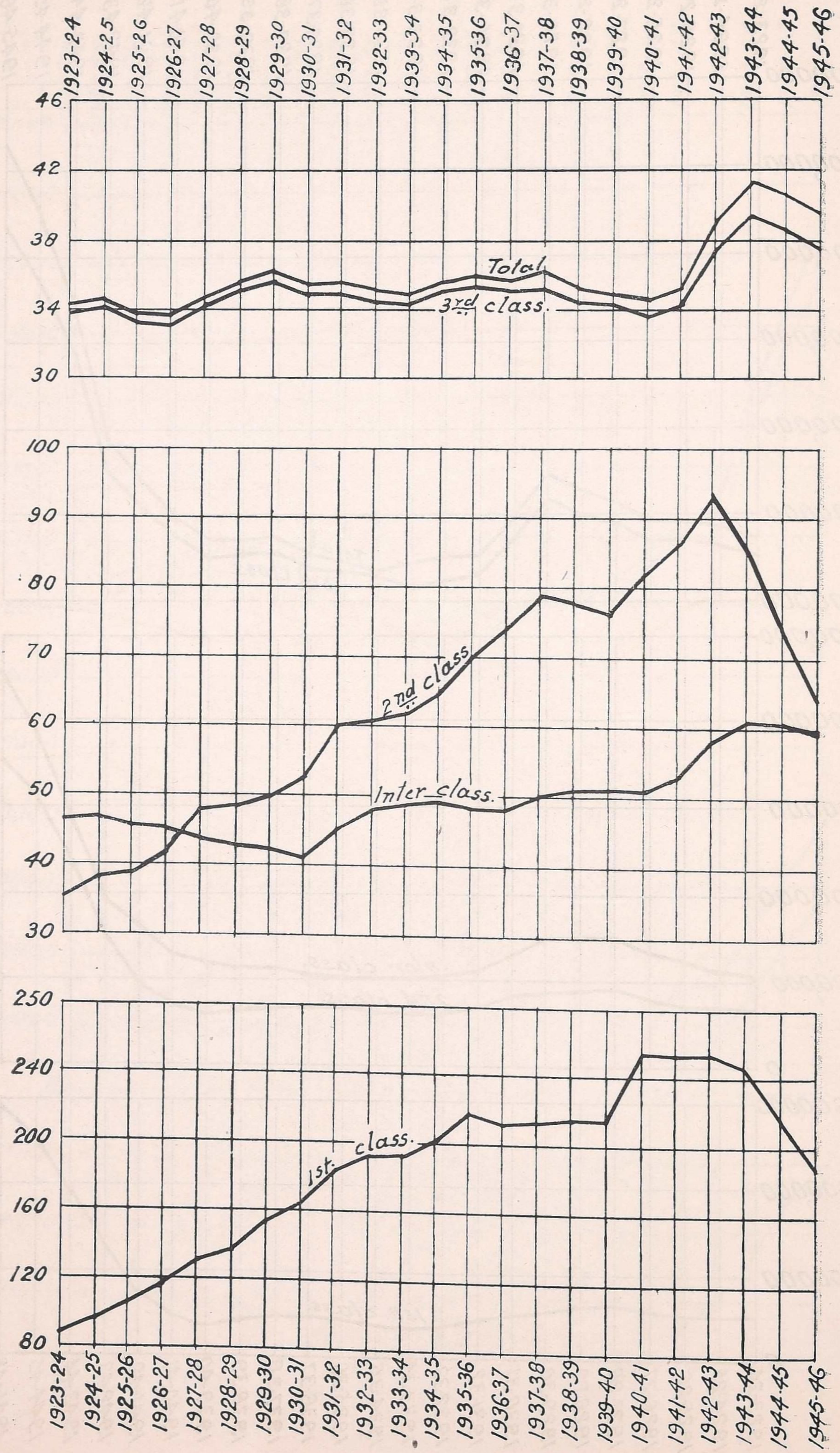



NUMBER OF PASSENGER MILES ON INDIAN RAILWAYS.
EXCLUDING THE BURMA RAILWAYS.
IN THOUSANDS.
1923-24
1924-25
1925-26
1926-27
1927-28
1928-29
1929-30
1930-31
1931-32
1932-33
1933-34
1934-35
1935-36
1936-37
1937-38
1938-39
1939-40
1940-41
1941-42
1942-43
1943-44
1944-45
1945-46
46,000,000
40,000,000
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
Total
3rd class.
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Inter class.
2nd class.
600,000
400,000
200,000
0
1st class.

ALL INDIAN RAILWAYS.

EXCLUDING BURMA RAILWAYS.

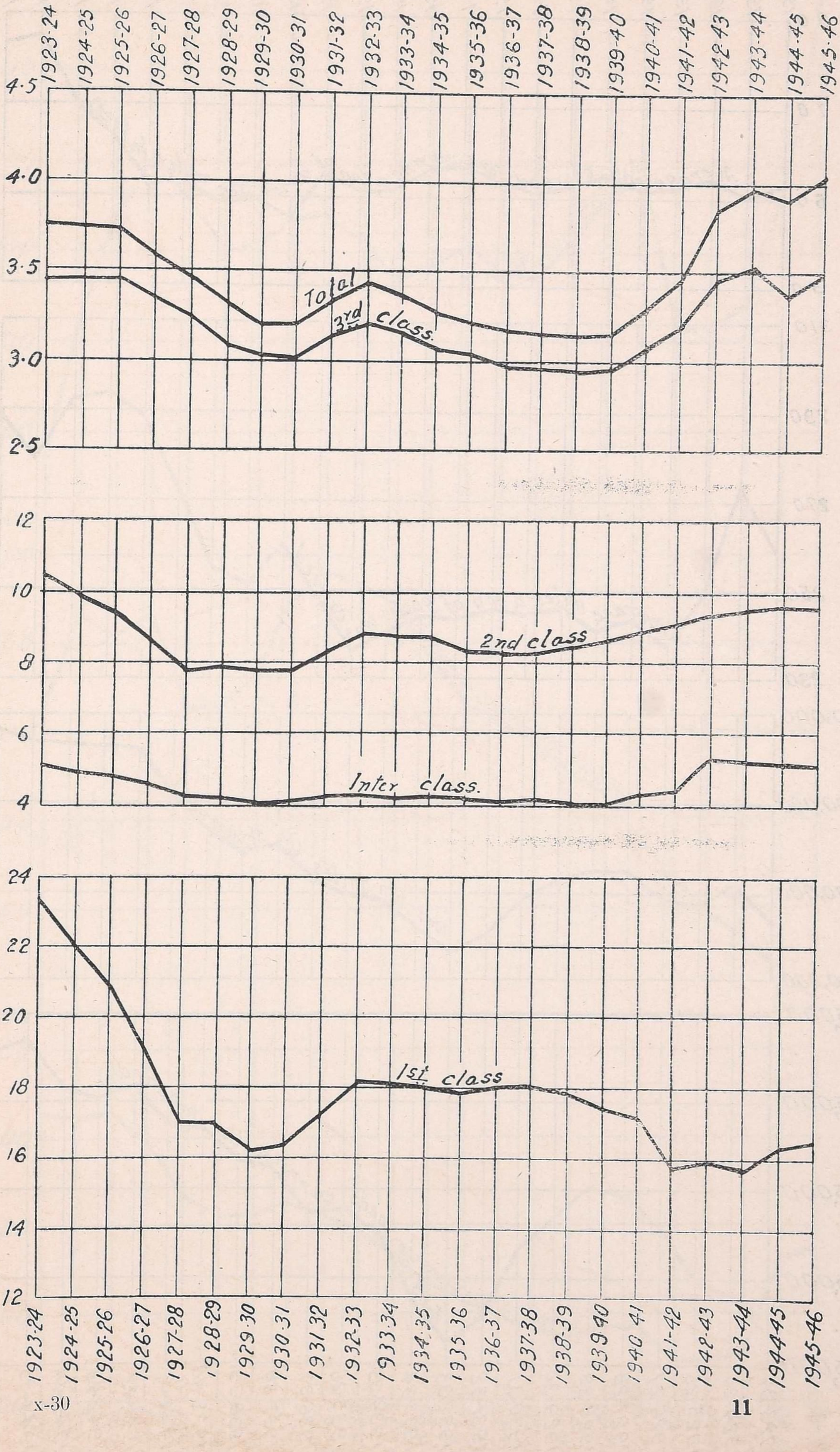
AVERAGE MILES A PASSENGER WAS CARRIED.



ALL INDIAN RAILWAYS.

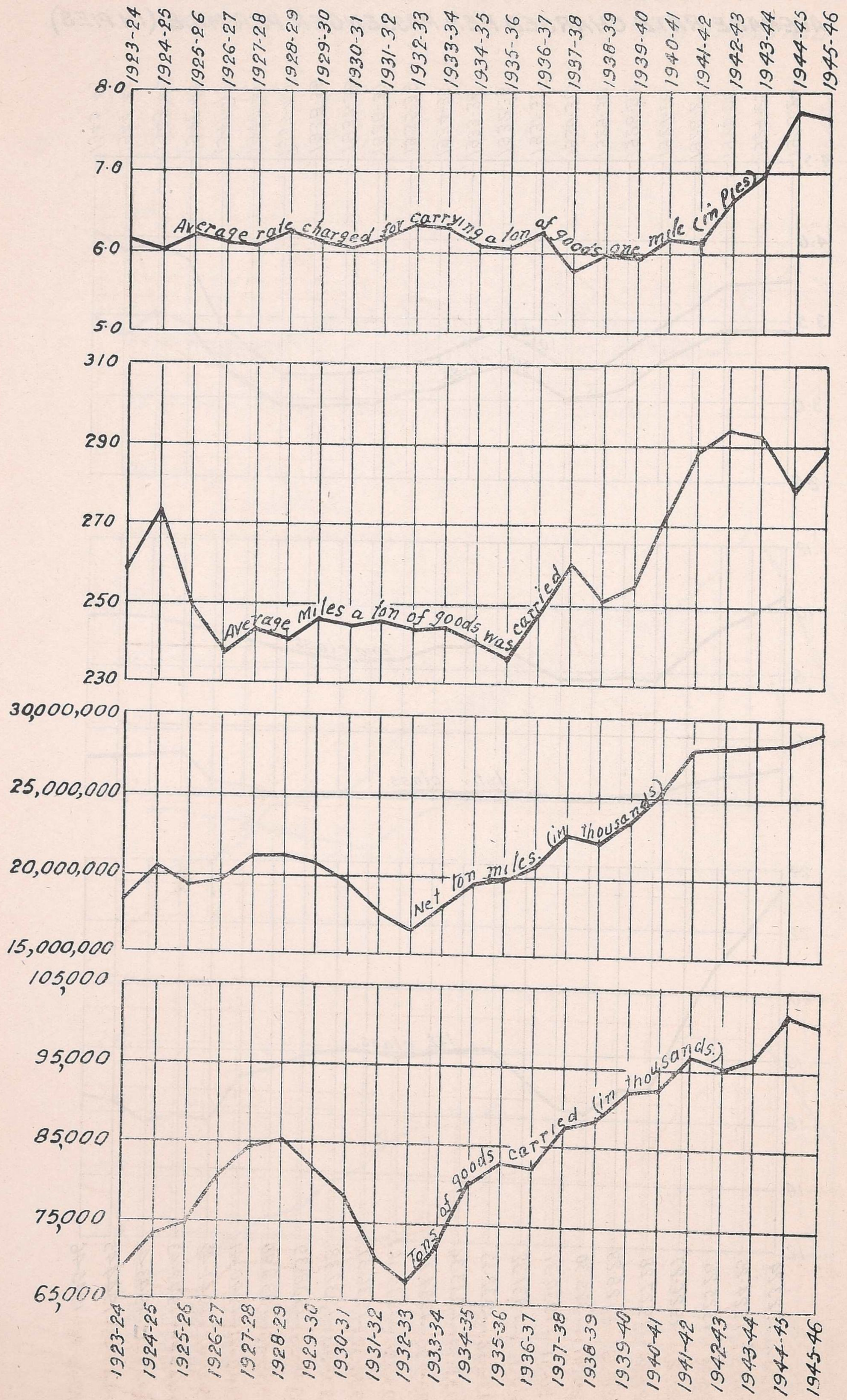
EXCLUDING BURMA RAILWAYS.

AVERAGE RATE CHARGED PER PASSENGER PER MILE (IN PIES)

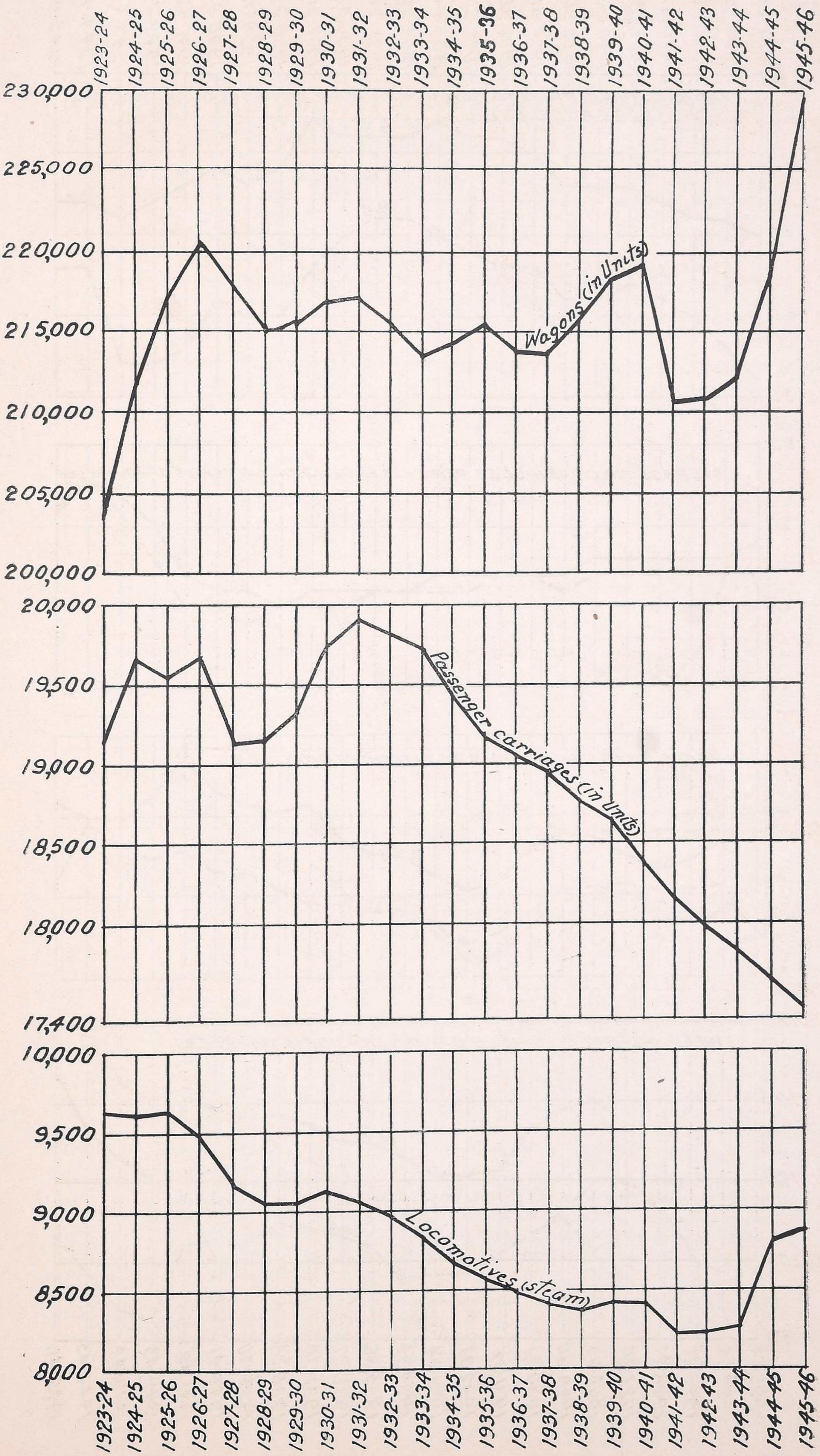


ALL INDIAN RAILWAYS.

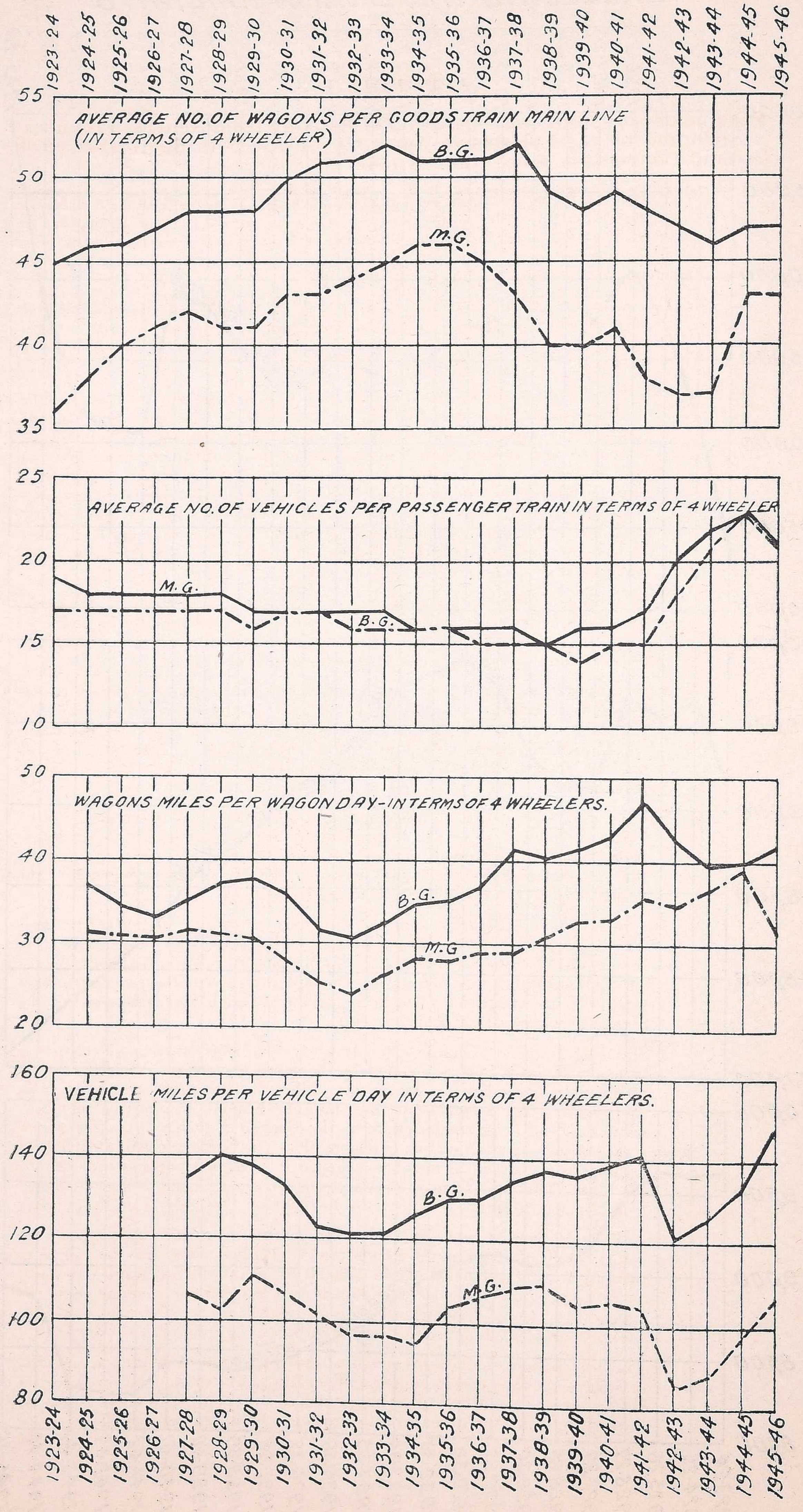
EXCLUDING BURMA RAILWAYS.



ROLLING STOCK IN SERVICE ON INDIAN RAILWAYS. EXCLUDING THE BURMA RAILWAYS.



CLASS I RAILWAYS.



APPENDIX B.

Resolution regarding the separation of Railway from General Finances, adopted by the Legislative Assembly on the 20th September 1924 and Convention Resolution of 1943.

" This Assembly recommends to the Governor General in Council that in order to relieve the general budget from the violent fluctuations caused by the incorporation therein of the railway estimates and to enable railways to carry out a continuous railway policy based on the necessity of making a definite return to general revenues on the money expended by the State on Railways.

(1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on the net receipts of railways.

(2) The contribution shall be based on the capital at charge and working results of commercial lines, and shall be a sum equal to one per cent. on the capital at charge of commercial lines (excluding capital contributed by companies and Indian States) at the end of the penultimate financial year *plus* one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that, if in any year railway revenues are insufficient to provide the percentage of one per cent. on the capital at charge surplus profits in the next or subsequent years will not be deemed to have accrued for purposes of division until such deficiency has been made good.

The interest on the capital at charge of, and the loss in working, strategic lines shall be borne by general revenues and shall consequently be deducted from the contribution so calculated in order to arrive at the net amount payable from railway to general revenues each year.

(3) Any surplus remaining after this payment to general revenues shall be transferred to a railway reserve; provided that if the amount available for transfer to the railway reserve exceeds in any year three crores of rupees only two-thirds of the excess over three crores shall be transferred to the railway reserve and the remaining one-third shall accrue to general revenues.

(4) The railway reserve shall be used to secure the payment of the annual contribution to general revenues; to provide; if necessary, for arrears of depreciation and for writing down and writing off capital; and to strengthen the financial position of railways in order that the services rendered to the public may be improved and rates may be reduced.

(5) The railway administration shall be entitled, subject to such conditions as may be prescribed by the Government of India, to borrow temporarily from the capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of such borrowings out of the revenue budgets of subsequent years.

(6) A Standing Finance Committee for Railways shall be constituted consisting of one nominated official member of the Legislative Assembly who should be chairman and eleven members elected by the Legislative Assembly from their body. The members of the Standing Finance Committee for Railways shall be *ex-officio* members of the Central Advisory Council, which shall consist, in addition, of not more than one further nominated official member, six non-official members selected from a panel of eight elected by the Council of State from their body and six non-official members selected from a panel of eight elected by the Legislative Assembly from their body.

The Railway Department shall place the estimate of railway expenditure before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demand for grants for railways and shall, as far as possible, instead of the expenditure programme revenue show the expenditure under a depreciation fund created as per the new rules for charge to capital and revenue.

(7) The railway budget shall be presented to the Legislative Assembly if possible in advance of the general budget and separate days shall be allotted for its discussion, and the Member in charge of Railways shall then make a general statement on railway accounts and working. The expenditure proposed in

the railway budget, including expenditure from the depreciation fund and the railway reserve, shall be placed before the Legislative Assembly in the form of demands for grants. The form the budget shall take after separation, the detail it shall give and the number of demands for grants into which the total vote shall be divided shall be considered by the Railway Board in consultation with the proposed Standing Finance Committee for Railways with a view to the introduction of improvements in time for the next budget, if possible.

(8) These arrangements shall be subjected to periodic revision but shall be provisionally tried for at least three years.

(9) In view of the fact that the Assembly adheres to the resolution passed in February 1923, in favour of State management of Indian Railways, these arrangements shall hold good only so long as the East Indian Railway and the Great Indian Peninsula Railway and existing State-managed railways remain under State management. But if in spite of the Assembly's resolution above referred to Government should enter on any negotiations for the transfer of any of the above railways to Company management such negotiations shall not be concluded until facilities have been given for a discussion of the whole matter in the Assembly. If any contract for the transfer of any of the above railway to Company management is concluded against the advice of the Assembly, the Assembly will be at liberty to terminate the arrangements in this Resolution.

Apart from the above convention this Assembly further recommends—

(i) that the railway services should be rapidly Indianised, and further that Indians should be appointed as Members of the Railway Board as early as possible, and

(ii) that the purchases of stores for the State Railways should be undertaken through the organisation of the Stores Purchase Department of the Government of India."

Convention Resolution of 1943.

The Legislative Assembly on 2nd March 1943 passed the following resolution:—

"Whereas it has been found that the Convention, which was adopted under the Assembly Resolution, dated 20th September 1924, and which was intended to relieve the General Budget from violent fluctuations caused by the incorporation therein of the railway estimates and to enable railways to carry on a continuous railway policy based on the necessity of making a definite return to general revenues on the money expended by the State, has not achieved these objects, this Assembly recommends to the Governor General in Council, that:

(i) for the year 1942-43, a sum of Rs. 2,35,32 thousand shall be paid to general revenues over and above the current and arrear contribution due under the Convention,

(ii) from the 1st April 1943, so much of the Convention as provides for the contribution and allocation of surpluses to general revenues shall cease to be in force.

(iii) for the year 1943-44, the surplus on commercial lines shall be utilised to repay any outstanding loan from the depreciation fund and thereafter be divided 25 per cent. to the railway reserve and 75 per cent. to general revenues, the loss, if any, on strategic lines being recovered from General Revenues, and

(iv) for subsequent years and until a new convention is adopted by the Assembly, the allocation of the surplus on commercial lines between the railway reserve and general revenues shall be decided each year on consideration of the needs of the railways and general revenues, the loss, if any, on strategic lines being recovered from general revenues."

APPENDIX C.

Officers of the Railway Department (Railway Board) and attached offices on the 31st March, 1946.

The Hon'ble Sir Edward Benthall, Member of Council of the Governor General.

Railway Board.

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Attached Offices.

(Central Standards Office).

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Mr. R. H. G. Da Cunha da Casta .	Research Officer (Mechanical).
Mr. M. V. Kamlani	Dynamometer Car Officer.

Books and Technical Papers published by the Railway Board.

BOOKS.

(1) Report by the Railway Board on Indian Railways. Published yearly, Price: Volume I—Report, Rs. 2-2-0 or 3 *sh.*, Volume II, Rs. 10-12-0 or 17 *sh.* (1944-45).

(2) Classified List of State Railway Establishment and Distribution Return of all Railways corrected up to 31st December 1944. Price Rs. 5.

(3) History of Indian Railways, constructed and in progress corrected up to 31st March 1939. Published sexennially. Price Rs. 4-10 or 7 *sh.* 3*d.*

TECHNICAL PAPERS.

(4) Over 314 papers have been published by the Technical Section of the Railway Board's Office. The papers comprise:—

(*a*) Original descriptions of railway works and studies of railway problems in India and elsewhere.

(*b*) Reprints of articles from foreign engineering magazines.

(*c*) Reprints or abstracts of reports received by the Government of India on subjects connected with railways.

A complete list of the papers can be obtained *gratis* from the Chief Controller, Standardisation, Central Standards Office for Railways, New Delhi. A few of the more important Technical papers are mentioned below:—

Technical Paper.	*Name.*	*Author.*
No. 72.	The design of well foundations for bridges	(Compiled.)
,, 148.	Statistics of Railway working expenditure	G. DEUCHARS.
,, 153.	River training and control on the guide bank system	F. J. E. SPRING.
,, 215.	The Hardinge Bridge over the Lower Ganges at Sara	SIR ROBERT GALES.
,, 219.	Technical education in relation to railways in America	H. L. COLE.
,, 239.	The Central Control systems for the scheduling of operations in locomotive repairs workshops in England	H. H. SAUNDERS.
,, 242.	Railway Statistics and the Operating Officer	MAJOR F. H. BUDDEN.
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,, 251.	A. R. E. and maintenance of Way Association's Impact tests on Railway Bridges	(Reprinted.)
	Description of the planning, Progress, Coaling and Engine Repairs, Schedule System introduced on the G. I. P. Railway Loco. Shops at Parel	F. G. S. MARTIN.
,, 256.	Notes on the preparation of railway projects	H. L. GLASS.
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,, 262.	Note on steps to be taken to permit of running the future large vehicles on Broad Gauge Railways, 1927	A. I. SLIEGH.
,, 263.	Note on composite Index numbers of Indian Railways	W. G. BARNETT.
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,, 266.	Principle of the Absolute Block System, 1929	L. H. KIRKNESS.
,, 267.	Flood Lighting, 1929	H. J. MULLENEUX.
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,, 272.	The Stereographic Survey of the Shakagam	MAJOR KENNETH MASON (Reprint)
,, 273.	A Schedule system for the Control of Operations in Workshops, 1929	H. H. SAUNDERS.
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Technical Paper.	Name.	Author.
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,, 287.	Report on Oil Burners and Wicks for Signal Lamps	H. E. COX.
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,, 289.	The Hump Yard in India	MAJOR H. W. WAGSTAFF.
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The prices of the papers vary from annas three to Rupees Fifteen.

The books and papers can be bought from the Manager of Publications, Delhi.

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